







# NOTES

ON

## MEDICAL MATTERS

AND

## MEDICAL MEN

IN

## LONDON AND PARIS.

BY

DAVID W. YANDELL, M. D.

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LOUISVILLE, KY.

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## P R E F A C E .

It was not with any expectation of making a book, that I commenced my *Notes on Medical Matters and Medical Men* in Europe, which, for more than two years, have occupied so much space in the WESTERN JOURNAL OF MEDICINE AND SURGERY. The letters were written to one of the Editors, and, at first, without any object beyond his personal gratification. They were deemed by him worthy of publication, and forthwith I was enrolled "Foreign Correspondent" of the Journal. In the midst of engrossing studies, which left me but little leisure, I was induced to continue the correspondence, not more by the evidence afforded me that my contributions were well received, than by the assurance of the working Editor, that they lightened his onerous labors. The correspondence, commenced and continued in this spirit, has, at length, grown into a volume. As the successive numbers were passing through the press, a few extra sheets were obligingly set apart for the author by the publishers, and these make the volume now presented to the reader. With this explanation, no apology will be necessary for the style in which it appears.

LOUISVILLE, Nov. 9, 1848.



ART. IV.—*Notes on Medical Matters and Medical Men in London.*  
By DAVID W. YANDELL, M.D.

In my last letter I said a few words about England's great surgeon, Robert Liston, but I had only time then to give my first impressions concerning this eminent man. In returning to him and dwelling more minutely on his character and history, I hope you will not consider that I am spending too much time upon one individual. If you could see the honor and respect with which Mr. Liston is treated by his colleagues, pupils, and the medical profession at large, and then see him among his patients and at the operating table, and more than all, witness his kindness to our young countrymen, you would not believe that I could easily say too much about him. Professor Gibson gives a characteristic description of Liston in "his Rambles in Europe"—of his passion for rowing, and for domestic animals, particularly "his enormous black cat *Tom*, who was not unfrequently mounted alongside his master in the splendid chariot, and a constant guest at his hospitable board"—of his tall, robust, and elegantly formed person; his handsome features and penetrating eye; his modesty, playfulness, and benevolence. Dr. G. had been told that he was rough and uncouth in his manners, "a perfect *ursa major*"—"a mere operator or carver without judgment or discretion;" but his quick eye soon saw in him a surgeon who, "ere long, would rise to the top of the profession" in the first city in the world. Mr. Liston is certainly eccentric; but the prejudices which were excited by his eccentricities have yielded to the sterling qualities which shine in him as a surgeon and a gentleman. He retains his fondness for rowing, which in his youth was so great that his father put him to the study of anatomy in order that he might be fitted for a nautical life, if his passion for the sea should continue after he had completed his professional studies. He did not go to sea, however, and his time is now so entirely employ-

ed by professional duties, that little leisure is left him for indulging in his favorite recreation.

Robert Liston was born at Linlithgowshire, in Scotland, in 1795, and consequently is now in the fifty-second year of his age. He commenced his studies preparatory to the life which he proposed following with Mr. Barclay, at that time professor of anatomy in the University of Edinburgh. His progress in anatomy was so rapid that he was soon appointed demonstrator for the pupils of Barclay, and in this capacity he continued to labor for six years, during the latter two of which he was house surgeon to the Edinburgh Hospital. After this he visited London, and under the direction of Mr. T. Blizard entered the London hospital. In 1816, being just twenty-one years of age, he took his degree in the College of Surgeons. The year following he returned to Edinburgh, where he taught anatomy and, for several years, surgery to a private class of more than a hundred and fifty students. He also received the appointment of assistant surgeon to the Edinburgh College, and after discharging the duties pertaining to that office with striking ability for nine months he was made chief surgeon, in which capacity he remained during his residence in Edinburgh. In 1834 he came to London where he has resided, engaged in a growing business, ever since. In 1835 he was elected surgeon to the University College Hospital, and made professor of Clinical Surgery in the University. Besides various papers in medical journals, and a Memoir on Hernia, he has written two works on Surgery which are well known in our country, one of them having gone through several editions, with valuable notes by your distinguished colleague, Professor Gross, and the other having been issued under the supervision of Professor Mütter, who has also made valuable additions to the original. They stand in no need of any <sup>\*</sup>praise which I could bestow upon them, having found their way into the libraries of all who take an interest in the practice or progress of surgery. Mr. Liston is still sound and vigorous in



mind and body, with the promise of many years before him—with even a youthful ardor in the accumulation of knowledge, we may yet expect to see many valuable contributions from his pen to our stock of surgical literature. At this season of the year he is not engaged in lecturing, so that I have not had many opportunities of forming an opinion of his powers in that way, but judging from the remarks I have a few times heard him make after his operations, I should say that he is not a fluent speaker, and that his aim is rather to give a clear statement of facts bearing upon his subject, than to appear graceful or eloquent. I have seen him execute several operations, the most important of which was amputation of the thigh by the circular method—a mode quite unusual with him, his uniform practice having been to perform the flap operation. It was one of those cases in which no display of peculiar skill could be made, but even in this Mr. Liston showed his greatness; and he did so not so much by the use of his knife, as by the general order and plan of the whole procedure. There was no noise, no bustle; every one, surgeons and assistants, had been taught his duties and his place. While the patient was being placed on the table for the operation, Liston was in another room changing his coat for an old one, which is his custom instead of putting on an apron. Presently he made his appearance, glanced at the bandages and the position of the patient, adjusted the tourniquet, and then took up the knife and began the operation in the quietest manner imaginable. After he had finished the amputation he applied most of the ligatures himself, adjusted the edges of the wound, gave a few directions about the treatment, made some remarks concerning the cause and nature of the operation, and, with a simple nod of the head, walked out of the room.

I am in London at the worst season of the year for the prosecution of my studies by means of lectures. The winter term is over, and the great men, with a few exceptions, have withdrawn from their chairs until October, when their

labors begin again, to terminate in April. Graham, Quam, Sharpey, Taylor, and Williams, esteemed among the most able teachers in London, are not now lecturing. A teacher with whom I am very much pleased is Mr. Murphy, author of a work on Parturition of great merit, which I hope will soon be republished in America. He is a plain, unassuming man, about forty-five years of age, of quiet manners and appearance. As a lecturer he would not strike you. His voice is feeble, his speech slow and indistinct, and his manner embarrassed and uninteresting; but his language is correct and scholarlike, simple and concise, and his matter excellent. As a man you are obliged to like to him; his face is expressive of great amiability and kindness, and is a true index to his character. I breakfasted with him, and found him pleasant in conversation, and exceedingly obliging. He is regarded as one of the first accoucheurs in Great Britain.

Professor Grant, one of the most distinguished of the scientific men of England, is delivering a course of lectures on zoology. He is fifty or fifty-five years old, about five feet ten inches high; his head is large and well formed; his eyes are blue, more nearly grey; his nose is sharp, small, and well turned; his mouth is that of a speaker, large and wide; his manner of lecturing, though somewhat diffuse, is very good, being graceful and agreeable. He warms up as he gets into his subject, and, in a lecture I heard him deliver, spoke with as much fire about the habits of the oyster, and the circulation of a lobster, as our eminent friend, Prof. D., would do before the "Physiological Temperance Society."

The students attending the hospitals and lectures in London have none of the affability so characteristic of young men in our country; neither are they so fine in appearance as those you are accustomed to see. They are earnest, assiduous students, but distant and indifferent; crowding around their teachers, eager to hear, careless whether standing in your way or not, and looking all the time most ludicrously frigid. Students of the same small class will often be found wholly unknown to each other. There are those I have

seen who have followed Mr. Liston and other teachers through the hospitals for three or four years, and expect to take their degrees soon, without ever having exchanged salutations with them. I know a class consisting of five students dissecting for Mr. Liston, who meet every morning, and have dined together, on an average, twice a week for two months, who, nevertheless, profess no acquaintance. I inquired of one of them, a day or two ago, the name of a gentleman, pointing to one of his class-mates. "Well, I declare I don't know," was his reply. But they are students, in truth. You may walk into the library room of the University College and find twenty or thirty young men poring over their books, from which they are taking notes, not one of whom will raise his head to see who you are. You ask the librarian for the book you wish to consult; it is handed to you immediately, and you take your seat at one of the tables without your next neighbor's turning his eyes to see whether you are an acquaintance or a stranger. There you may occupy yourself all the morning, and never hear a word spoken above a whisper. Every student attending the University College takes copious notes. The lecture rooms are well adapted to this purpose, each seat having on its back a plank of suitable width and height to form a desk for writing. The note-books generally used are well bound, of convenient size to be carried in the pocket, and look as if they were intended for preservation and future reference. When the hospitals are visited by the attending physician or surgeon, you see the best students with their note-books in their hands ready to write down whatever may be said respecting the cases, and copy out the prescriptions which are placed upon a board at the head of each bed.

The relations between teacher and pupil here are by no means such as exist in the United States. The surgeons talk to their dressers in the hospitals in a way that not many of our students could bear—bear, I mean, without injured feelings. They treat their pupils as boys of ten and fifteen years are treated with us by the roughest pedagogues. There

is no social intercourse—no conversation in the door-way and on the steps of the College—no walking into the room of a professor to while away the hour occupied by one of his dull colleagues in turning over his books and preparations, or “probing” him about your chances for a diploma. No; there is nothing of all this between the English medical student and his teacher. A simple elevation of the hat on the part of the pupil, and an ambiguous touch of the beaver by the professor, makes the sum of their social intercourse, unless indeed the student chances to be a “dresser” in a hospital. In that case, if a bandage should be awkwardly applied, or an ulcer found in a filthy condition, or there be a patient in a bed of whose case the dresser happens to know nothing, ten to one, “stupidity;” “carelessness;” “without excuse;” “any one should have known better;” “who ever heard of such a thing!” “what were you doing all day, that you could not attend to this?” will greet his ears in much less time than it has taken me to write down the brief, emphatic sentences, which sound strangely enough to one unused to this style of address.

I send you two cases which I met with in a late number of the Dublin Quarterly Journal, (see page 153) in the first of which I feel more than ordinary interest because there is at this time in the University College Hospital a case analogous to it—aneurism of the radial artery, caused by a gunshot wound of the hand, which Mr. Liston commenced treating, by pressure, a short time before my arrival, of which I will make a report when the patient is discharged. The following are the particulars of a case of *femoral hernia* which I saw treated in the same hospital.

M. W., a washerwoman, æt. 43 years, was admitted into the hospital on the morning of the 18th of May, with femoral hernia of the right side. Six years before she had been operated upon by Mr. Liston for hernia occurring in the same spot; from that time she had constantly worn a truss which, although it occasionally allowed a portion of the bowel to protrude, prevented its coming down to a danger-

ous extent. Two days previously to her admission, while lifting some heavy weight, she felt the bowel pass down in larger bulk than usual, and was not able as on other occasions of the kind to return it. When I first saw her, the tumor occupied nearly the whole of the inner surface of the thigh, and was as large as a fœtal head; it was slightly painful and tender to the touch, and had produced some constitutional disturbance.

The patient was placed in a warm bath with a view to relaxing the muscular system; while she was in the bath attempts were made at reduction by the taxis; but these failed until the patient by her own efforts returned the bowel, which ascended with a gurgling noise. The finger could be passed up through the crural rings; no stricture of the bowel could be detected, showing that the reduction had been complete. An anodyne and a cathartic enema were ordered.

19th. The patient passed a restless night; countenance anxious; tongue coated; pulse quick and feeble; breathing hurried and performed entirely by the muscles of the chest; pain and tenderness upon pressure in the lower part of the abdomen and along the whole course of Poupart's ligament. She was ordered xv leeches to the abdomen; pills of calomel grs. ij, pulv. opii gr. ¼, every four hours; cathartic enema.

20th. Patient slept none; pulse 120, and feeble; tongue coated in the middle and red at the tip and edges; thirst excessive; pain and exquisite tenderness over the abdomen; countenance extremely anxious. Repeat the pills every two hours; ten leeches, afterwards a linseed meal poultice to the abdomen; cathartic enema.

21st. The patient is evidently sinking; pulse weak, and 140; the same group of symptoms but greatly exaggerated; during the night patient vomited a dark colored matter, and had several bloody stools. Ordered blister to the abdomen; wine, and pills of calomel grs. iv and opium gr. ¼ every hour; mercurial ointment and olive oil ää ʒ ij; of this ʒ ij to be rub-



bed into the abdomen every alternate hour. The tumor has returned several times but was easily reduced, with the same gurgling noise; the finger could be readily passed into the abdomen through the enlarged rings, and at no time could any strictured portion of the bowel be detected. At 6 P.M. the patient died, vomiting a matter of the color and appearance of coffee grounds.

*Post-mortem.*—This revealed nothing save the evidence of peritonitis and enteritis throughout almost the whole of the abdomen, and the congested condition of the bowel which had been protruded. There was no appearance of stricture in any part of the intestines. The greater part of the small intestine presented, here and there, patches of lymph, and in all parts an amount of congestion which as effectually blocked up the alimentary canal as a stricture could have done. I watched the progress of this case, saw it treated by Dr. Quain, and witnessed the post-mortem examination with great interest. The propriety of an operation in order to determine whether or not there was stricture, I heard suggested. The inflammation which led to the fatal result was doubtless produced by the too powerful efforts, made by the patient herself, to reduce the hernia previous to her admission into the hospital.

London, May 25th, 1846.

strained by opium, acetate of lead, and a large blister over the abdomen.

July 12. Patient convalescent. I subjoin a partial analysis of the blood in this case, its completion having been defeated by the mistake of a medical friend and assistant.

Temperature	-	-	-	-	100°
Specific gravity	-	-	-	-	1028
Fibrin,	-	-	-	-	.5

It is much to be regretted that this analysis was not perfected. The temperature was higher, by several degrees, than I have found it in chronic pneumonia and chronic rheumatism, in which the fibrin was nearly double the healthy standard, and yet in this specimen the fibrin is very greatly diminished.

July 27, 1846.

ART. IV.—*Notes on Medical Matters and Medical Men in London.*  
By DAVID W. YANDELL, M.D., of Louisville, Ky.

Mr. Walsh, author of a recent and successful work on *Cancer*, who is now lecturing on *Pathology* at the University College, is one of the best lecturers to whom I have yet listened in London. He is somewhat too rapid, and not sufficiently distinct, but he has life and animation which make up for other defects, keeping one awake while he is lecturing. Dr. Quain, who has distinguished himself by his anatomical works, as a lecturer is above the common run of professors, but neither he, Liston, Murphy, Thompson, nor Williams, of the University, nor Stanley, of St. Bartholomew's would be fancied by the majority of American medical students. Liston is a poor speaker; Cooper is but little better; Graham is considered excessively dull, and Thompson, now delivering a course of lectures on medical jurisprudence, certainly is so.

From all that I have heard, I am satisfied that, in manner, the medical teachers in America are superior to the English.

I saw, some days since, the great "grinder," Powers. He is a little round-faced, spectacled man, with an amiable, though not intellectual expression of countenance, who, with a strange certainty, prepares candidates for a successful examination before the Apothecaries' Hall. He has now a class of one hundred and twenty, some of whom are taking first lessons; others are more advanced, while a few are being "rubbed up" for the final ordeal to which they expect soon to submit. I was told by a gentleman who passed the Hall not many months ago, that Powers asked him in the morning questions which were propounded to him by the board of examiners in the evening. Whether this was accidental or not he did not express an opinion; I have no doubt it was. The usual fee of the "grinder" is twenty-five dollars, and I believe is never less than this. Some years ago there was another Powers, also a popular "grinder," whose annual income is said to have been not less than £2,000, upon which he amassed such a fortune that he has been able to retire from business.

On the 9th of June I saw Mr. Liston perform several operations, one of which was tying the brachial artery for *false aneurism* of the hand. This is the case of which I made mention in my last letter, as being under treatment, by pressure, in the University College hospital. A young man, while shooting on "good Friday," had the misfortune to burst his gun, which tore off three of the fingers of his left hand, and inflicted an extensive and deep wound on the hand. While the wound was under treatment pulsation was observed in a small, filbert-like tumor situated near the centre of the palm. Mr. Liston advised pressure to the brachial artery, which was applied with very evident benefit, for a season, but after a time the pulsation in the tumor returned, and the patient becoming dissatisfied with the tardy process of cure insisted upon an operation, which Mr. Liston executed with his characteristic neatness and success.

Mr. Murphy I have mentioned as professor of midwifery in the London University, whose writings and practice have placed him in the first rank of English obstetricians. His lectures are full of instruction. I was much interested in one which he delivered a few days since on the causes of *tedious and difficult labor*. He does not regard *hydrocephalus* as so serious an obstacle to labor as it is esteemed to be by many accoucheurs. In the first place it does not follow, he maintains, that the cranium of the child with *hydrocephalus* is so distended with fluid that compression of the bones cannot be effected; for in many cases where the head was greatly increased in size he has found the bones movable and easily compressed. He cited in proof of his position the six cases of *hydrocephalic* children reported by Collins, of which only a single one caused a difficult labor. Dr. Robert Lee, however, attended five cases of a singular description in which all gave rise to tedious and difficult labors. Professor Murphy clears up this contrariety in men equally entitled to belief, by saying that Collins saw his cases in a hospital, where, having the management of them from the earliest stage of labor, he was prepared to meet and ward off any untoward symptoms that arose, while Dr. Lee saw his patients after they had been in the hands of midwives who probably did more harm than good, and only called him in to relieve them of their difficulties. If trouble does arise from this cause, it is when the head is at the brim of the pelvis, where various accidents may detain it; but when the pelvic cavity is once fairly attained delivery will take place. Should the head not clear the brim it is your duty to perforate it; the extraordinary size of the fontanels and the peculiar feel of the head rendering the diagnosis easy.

Prof. Murphy judges of the health of a child by the way in which ossification goes on, the age at which dentition begins, and the firmness of the osseous system. He has observed, that one of the obstacles to labor---increased ossification of the bones of the pelvis---is not met with in the upper classes of society, nor among the lower, in cities, but is found in a

rustic population, the females of which possess a masculine vigor of constitution, and in whom there is an abundant deposit of bony matter. He has remarked that the opposite cause to this—deficiency of ossific development—is met with in the poor of cities, among females of delicate constitutions, whose systems have never deposited bony materials in a normal quantity.

Prof. M. has been in the habit, for several years, of suggesting in his lectures an operation which has been three times lately performed by Dubois, and is henceforth to rank as one of the legitimate operations in surgery. In cases of contraction of the cervix uteri to an extent rendering labor difficult and dangerous, he proposes that incision into the neck should be practised. For this purpose the knife was used by Dubois, in some of his cases; but in others he deems the scissors preferable. Professor Murphy would be governed in the choice of the instrument by the nature of the case; where the cervix is far back he would use the scissors to relieve the posterior lip, but if it were forward and readily reached, he would resort to the knife. The knife used is the bistoury employed in removing the amygdalæ. The index finger of the left hand is to be introduced into the vagina, placing the palmar surface upon the spot where the incision is to be made; the bistoury is next carried along in contact with the finger until its point, passing within the cervix, comes in contact with the end of the finger. By means of a semicircular motion the cutting edge of the bistoury is then directed perpendicularly towards the free edge of the os tinæ; if this be tense the incision will be most easily effected by a sawing motion of the instrument. Prof. M. advises that the incision be made small, and if one is not found sufficient would make others. If the incision is to be made to the right, the right hand must be used instead of the left. The dilatation is generally sufficient in the course of a quarter of an hour after the operation to use the forceps, if it be desirable to terminate the labor by instruments.



The counter-indications to this operation are, thickening of the cervix, and attachment of the placenta near this part of the uterus. If the cervix has not become thin, the operation by inducing hemorrhage, or causing laceration from the extent of the incision, may terminate fatally instead of proving an advantage.

In his clinical lecture, some days since, Dr. Quain insisted that there is no such thing as purely spasmodic stricture of the urethra. In cases of stricture, after using fomentations to the lower part of the abdomen and perineum, a warm bath, tartar emetic, a saline purgative and opium, he recommends the introduction of a *soft* catheter, instead of the one commonly employed. He is in the habit of using an instrument of this description both in hospitals and his private practice, and he prefers a large catheter, which he has sometimes been successful in introducing after surgeons had failed to pass a small instrument. He can give no directions as to the manner of introducing the catheter, dexterity in this, as in nearly all the operations in surgery, depending upon practice. He advises students to carry a catheter in their pockets, and to take every opportunity to introduce it into the dead subject. Hold the instrument loosely, are his directions, and rather suffer it to pass by its own gravity than use any force to carry it forward. He spoke of two cases of retention of urine, one occurring in a young man in consequence of stricture; the other in the person of a man eighty years of age, produced by enlarged prostate, which, after existing for sometime, brought on paralysis of the bladder. In the young man the bladder could be felt above the pubis, round and well defined; in the man advanced in life this roundness was absent, and the outlines of the distended organ were not well defined. The urine in paralysis of the bladder is muddy, and, under the microscope, purulent. He injects the bladder in such cases with warm water to wash it out, and gradually reduces the temperature of the water until it is cold, which acts favorably in restoring the contractility of that viscus.

Erysipelas is at present prevailing in the University College hospital, where Dr. Quain lectures, but not to a serious extent; it had supervened upon the amputation of a great toe, and had followed a wound of the face. At certain seasons of the year, owing to the constitution of the atmosphere or some other cause, it attains an epidemic prevalence, seizing upon every wounded surface, and following the slightest operations. Dr. Quain has not much confidence in local applications in this affection; it is a constitutional disease and local remedies cannot reach it. When it follows upon wounds, he thinks it well enough to apply fomentations, which answer the good purpose of allaying pain; but as to all the other topical means, he has tried them without much benefit, and believes that *aqua fontana* is about as efficacious as *lotio plumbi*, or indeed anything else. In hospital practice he has abstained from depletory measures, and is in the habit of giving stimulants, the alcoholic drinks to which the patients are accustomed being preferable to wine, which hospital patients seldom or never use.

To-day I saw Mr. Morgan, of Guy's hospital, amputate the fore-arm for diseased carpus. He is a good operator, rather too slow, I should say, and not by any means striking. Guy's hospital was built by Thomas Guy, who left an immense property for its maintenance and support. Being a private institution, that is, not supported by private contributions or by government patronage, it publishes no report of the number of patients annually treated in it, and other statistics of the kind, which you see about the steward's office in the other hospitals. The number of beds averages five hundred, the wards being capable of containing more. Bransby Cooper, Key, and Morgan are the surgeons; Addison, Babington, and Barlow are the physicians, and Oldham and Lever the obstetricians. The school in connection with this hospital I should judge, from the manner in which the students are instructed in going round the wards with the physicians and surgeons, is one of the best in London. Powers, the grinder, I am informed, says "his best men are from Guy's."

The *régime* is different from that of the medical department of the London University; students and teachers are not at the same immeasurable distance from each other; more is said in the wards of the hospitals; more questions are asked by the pupils, and altogether more instruction given and received. There is a good class now in attendance at this school. Students attend four winter courses, and about eighty entries are made, yearly, which would give a class of two hundred and forty or fifty. Some years ago, when only those who had studied in London were eligible to the degree in the College of Physicians and Surgeons, the classes of this and all the other metropolitan schools were larger than at present, students from the provincial schools being now allowed to become candidates.

The museum at Guy's numbers nearly ten thousand specimens, eight thousand of which pertain to physiology and pathology, and the remainder to comparative anatomy.—There are also in the museum three thousand drawings illustrative of the different parts of the human system, besides about seven hundred diagrams. An artist is kept constantly employed in this department, at a salary of \$2000 a year, and some of his work is highly creditable. The various forms of cutaneous disease he has represented so faithfully that students are afforded means of recognising and distinguishing between them, such as they will seldom meet with elsewhere. I saw several young men in the museum studying anatomy from the views in wax, which were spread out in glass cases; and a capital mode of study it is too, second only to dissection of the dead body, and, in this hot weather, far preferable to that. You see just in front of you, as you enter this apartment, "Silence is indispensable in a place devoted to study," in large letters. Were I a student at Guy's, I should be tempted to pass much of my time learning anatomy in this quiet, comfortable room.

St. Bartholomew's hospital is one of the largest and wealthiest of all the London charities. In common with all similar institutions here, it has an operating theatre, an anatomi-

cal museum, and a library attached to it. The museum contains three thousand specimens; the library has four thousand standard works; the number of its beds is five hundred and thirty, and in 1845 the number of its patients was forty-two thousand, of which five thousand five hundred were "in patients," and the remainder "out patients and casualties." Mr. Lawrence, who is surgeon extraordinary to the Queen is principal surgeon to Bartholomew's. As a writer of great ability Mr. Lawrence is well known in America, and at home he is esteemed one of the best educated and most scientific men in England. He has a fine intellectual face, and his manners are peculiarly bland, cordial and agreeable. Dr. Rigby is also connected with this hospital.

University College hospital is not on so large a scale as either Guy's or St. Bartholomew's. It is one of the hospitals supported by voluntary contributions, and was erected, and is sustained principally for the benefit of the medical college, which is situated immediately opposite to it. Notwithstanding its comparatively small size, it is an institution at which much is to be learned. The number of its beds is about one hundred and fifty, and an addition to it which will soon be completed will make room for fifty more. The number of "in patients" last year was thirteen hundred and seventy-nine; of "out patients" six thousand eight hundred and forty-six; of lying-in women attended at their own residences four hundred and eighteen; of casualties eight thousand three hundred and seventy-nine, making, in all, seventeen thousand and forty. Samuel Cooper, Liston, Quain, Morton, Taylor, Williams, and Murphy are connected with this hospital.

While noticing the public institutions in London connected with our profession I must say something of one of the most magnificent of these, the Hunterian Museum.

John Hunter died on the 16th of October, 1793, aged 65 years. In his will he directed his museum to be offered to the British Government on such terms as appeared reasonable, and in the event of refusal by the government, then to

be sold, in one lot, to a foreign State, or such purchaser as might offer. About 1799 Parliament appropriated the sum of fifteen thousand pounds for the purchase of the museum. An offer of the collection was first made by the government to the College of Physicians, but as the College was not wealthy it declined to receive it, and its example was followed by the Royal Society and the British Museum. Finally, it was tendered to and accepted by the College of Surgeons, which has gone on in the great work of which the museum of Hunter was the basis, until it has now a collection unequalled in the world. Mr. Lawrence speaking of the museum says, "so imperfectly was this creation of genius appreciated at that time, that the offer to the government was received very coldly, and six years elapsed before it was finally accepted. When it was mentioned to Mr. Pitt, then Prime Minister, he said, 'What; buy preparations? I have not money to buy gunpowder.'"

The main terms and conditions of the donation were briefly these:—1st. The collection shall be open four hours in the forenoon of two days every week for the inspection and study of the fellows of the College of Physicians, the members of the Company of Surgeons, and persons properly introduced by them; a catalogue of the preparations and an officer qualified to explain it being at such times always in the room. 2d. That one course of lectures, not less than twenty-four in number, on comparative anatomy and other subjects, illustrated by specimens in the museum, shall be given every year by some member of the Company. 3d. That the preparations shall be kept in as good a state of preservation as possible at the expense of the corporation. The museum is open to the fellows and members of the college and such individuals as they may introduce; to members of all the learned and scientific bodies in the United Kingdom; to students of medicine, and to learned and scientific foreigners, members of parliament, peers, &c.

In 1806 and subsequently parliament appropriated £27,000



500, and the College of Surgeons about an equal sum for the erection of an edifice to contain and exhibit the Hunterian collection. This was completed in 1813. The industry of the members of the College was such, that in 1835 the building had become too small to contain the additions which had been made to the collection and the rapidly increasing library, and the College came forward and subscribed £40,000 for the erection of the present immense edifice in which is to be seen the Hunterian and collegiate collections. The College up to this time has expended upon the museum, exclusive of incidental expenses, upwards of £70,000; and the annual charge for its support falls but little short of £3,000.

The Hunterian collection contained, in all, ten thousand five hundred and sixty-three specimens. Of these 963 pertained to osteology, 1345 to natural history, 1215 were fossils, 617 dry preparations, and 3745 preparations in spirits; constituting the *physiological* department. The *pathological* department contained of preparations in spirits 1084 specimens, dry preparations 625, monsters and congenital malformations 218, calculi and concretions 536, microscopic preparations of normal and abnormal structures 217. The members of the College have added 12,347 specimens to the museum; of which, in the physiological department, 2119 are osteological, 240 are dry preparations, 1998 are in spirits, 427 relate to natural history, and 1200 are fossils; and, in the pathological department, the preparations in spirits are 2142, the dry preparations 1365, the monsters and congenital malformations 187, calculi and concretions 384, and the microscopic specimens 1791.

The museum, through the liberality of its proprietors, is open four days in the week, instead of two, and under special circumstances visitors are often admitted on the other two. The library, consisting of works on all branches of medicine as well as the collateral sciences, embracing a great number of most costly books relating to natural history, amounts to 20,000 volumes; it is kept complete by the regular addition of new works, and affords every facility for

study, being open from 10 o'clock until 4 daily. The books have cost the College about £10,000, and the annual expense of the library is about £600. The average weekly number of visitors is one hundred and twenty. The Council, some years ago, instituted studentships, three in number, with salaries of £100 per annum, which are held for three years. The appointments are bestowed as the rewards of merit, the test being a strict examination.

The College of Surgeons was incorporated by a charter granted in 1800 by George III. Under her present majesty the charter has been amended, and the institution has taken the name of the Royal College of Surgeons of England. To this corporation the Hunterian museum belongs, and to it is also due the credit of having retained the inestimable "intellectual treasure created by the genius of one of her most gifted sons." The manner in which this trust has been augmented; the liberality with which the doors of the museum and library are thrown open to, I may say, every one; the order and talent displayed in the arrangement of the specimens—where, for example, fossil remains are placed in juxtaposition to the most nearly allied existing species, thus making the vestiges of a former world throw light upon the laws of organization—the excellence of the descriptive catalogues; the memoirs published by different members of the College, all testify in the strongest language to the intelligence, love of science, and indefatigable zeal of the governors of the institution. These are men who, by age and professional eminence, have entitled themselves to the management of its affairs.

It would take up an entire number of your Journal to give even a synopsis of the specimens contained in this mighty receptacle, each one with its label descriptive of what it is. The College is about publishing a catalogue of the pathological cabinet, which will contain, as far as it is known, the history of every patient whose case has furnished specimens to the collection. In this department, among thousands of other interesting things, is the sac of a *popliteal aneurism*.

from a man on whom John Hunter operated, at St. George's hospital, in December, 1785. This was the first case in which the operation for popliteal aneurism was performed according to Hunter's new method—tying the vessel on the anterior part of the thigh, at some distance from the diseased point, “thereby to diminish the risk of hemorrhage, and admit of the artery being more readily secured, should any accident happen.” This sagacious surgeon was also of the opinion, that “the force of the circulation being thus taken from the aneurismal sac, the progress of the disease would be stopped; and he thought it probable that, if the parts were left to themselves, the sac with its contents might be absorbed, and the whole tumor be removed, which would render an opening in the sac unnecessary.” The history of this interesting case is as follows:

The patient was a coachman, aged 45 years; the disease had first been perceived three years previous to his admission into the hospital, and had gradually increased during the whole of that period. He recovered from the operation and returned to his employment, but died from the effects of fever fifteen months afterwards. On examination after death, the cicatrix on the anterior part of the thigh was scarcely perceptible; the ham had no appearance of tumor, and, to the eye, was exactly like that of the other limb; but there was a solid tumor perceptible to the touch filling the hollow between the condyles. The femoral artery was impervious from the point where it gives off the *arteria profunda* as low down as the portion included in the ligature; and at that part there was an ossification for an inch and a half along the course of the artery, of an oval form, the rim of which was solid, becoming thinner towards the centre, and not bony but ligamentous. Below this part, the femoral artery was pervious down to the aneurismal sac, and contained blood, but did not communicate with the sac itself, having become impervious just at its entrance. What remained of the aneurismal sac was somewhat larger than a hen's egg, but more oblong and somewhat flattened, extending along the

artery a little way; it was perfectly circumscribed, not having the smallest remains of the lower orifice of the popliteal artery, and contained a solid coagulum adhering to its internal surface, and which appeared to be composed of concentric laminæ, uniform in color and consistence.

In the case containing urinary calculi, I observed one taken after death from the bladder of Sir Walter Ogilvie, which weighed forty-four ounces Troy, and measured sixteen inches around its longer axis, and fourteen around its shorter. Dr. Powell analysed this calculus, and found it to consist of "the triple phosphate of ammonia and magnesia, with phosphate of lime, and a large quantity of animal matter."

I will mention only one other specimen—a tibia and fibula with a large osseous tumor attached. The tumor has grown almost entirely from the anterior and lateral parts of the upper two-thirds of the tibia; it is of an irregularly oval form, and measures ten inches downwards, about fourteen inches from side to side, and exactly one yard in its chief circumference. Its surface is for the most part smooth, and evenly covered by a very thin layer of compact osseous tissue. Its interior is constituted of coarse cancellous tissue, about as heavy as healthy bone. Its exterior is continuous with the surface of the tibia, the walls of which are expanded and drawn out at its base of attachment. The fibula is pushed outwards, and so compressed by the growth of the tumor, that it is in some parts nearly two inches in width, and hardly two lines in thickness. The limb was amputated at St. Bartholomew's hospital, and weighed, with the foot and its appendages, forty-two pounds. One never grows weary of wandering through this vast repository, where so much is to be seen illustrative of healthy structure, as well as of the ravages of disease; but I fear I have already wearied your readers with these details.

Every scientific traveler in London is attracted to the Royal Institution, not only as the theatre of Sir Humphry Davy's

great achievements in chemistry, but as the place where Michael Faraday is now engaged in lecturing. We are familiar with the name of Faraday at home, and I was impatient to hear him in his laboratory. I believe I cannot interest you more than by giving you some account of the institution to which he belongs, and of one of his remarkable lectures.

The Royal Institution of London, a charter for which was obtained in 1800 and confirmed ten years afterwards, possesses a laboratory for the promotion and advancement of chemical knowledge by original investigations and courses of practical lectures, a large library, and a museum, containing a mineralogical collection, composed chiefly of British specimens. The professorships of chemistry are at present occupied Mr. Brande and Dr. Faraday; Mr. John Lindley holds the chair of botany, and Dr. W. B. Carpenter that of physiology. The chair of natural and experimental philosophy is at this time vacant. Everybody, I suppose, has his notions of what constitutes a lecturer; according to my own, Faraday is, beyond all question, the best to whom it has been my fortune ever to listen. If rapidity without haste, fluency without verbiage, succinctness and earnestness, clearness and propriety of enunciation, and ease and grace of manner, are the attributes of an accomplished lecturer, then he is perfect. He is in size rather below the common stature, and, I should say, about fifty years old. The expression of his face is strikingly intelligent. He manipulates with the confidence, dexterity, and precision of a juggler, reminding one forcibly of feats by sleight-of-hand; such is the quickness and perfection of his experiments. I was told by an intelligent gentleman, who sat by my side, a week ago, listening to the last lecture of his present series, that he rarely ever fails in an experiment. The evening on which I heard him was occupied chiefly with illustrations of the *cohesive force of water*. He first spoke of water in its three conditions of solid, liquid, aeriform. Substances which appear perfectly liquid, and which would remain so for an indefinite length of time, if left in a perfectly quiescent state, become solid by



the slightest mechanical agitation of their particles. This he illustrated by the well known experiment of a solution of the sulphate of soda, which becomes instantly a crystalline mass on the slightest agitation, or by dropping into it a solid body, or simply pouring it from one vessel into another; but owing to the high temperature of the room this experiment was less successful than I have generally seen it.

Dr. Faraday alluded to the somewhat analogous condition in liquids and vapors, which was discovered by M. Cagnard de la Tour, and is known by his name. It is this:—under a sufficient pressure, and at a certain temperature, some liquids, and water among the rest, may be converted into gases which occupy no more space than the liquids themselves. The slightest attention to the properties of water will convince any one of the error of the common notion, that its particles possess no cohesive force. If you immerse a solid body in water, a portion of the water adheres to it; and this has been called by Dr. Daniell heterogeneous adhesion. But since only particular portions of the water can come in contact with the surface of the solid body, it follows that this adhesion can exist only between it and a mere film of water; and from their ability to resist the power of gravity it is obvious that the accumulated globules must be held together by a strong cohesive attraction between themselves. Numerous experiments may be performed to show this. Thus, by balancing a smooth glass plate, with a known area, at the end of a scale beam, and bringing this into perfect contact with the surface of some water, which is done by covering the glass with a thin pellicle of soap, it will be found that more than an equivalent weight is required to lift the glass, and that a mass of water is actually raised up before the plate is detached. Laplace conjectured, though, as Dr. Faraday holds, erroneously, that the force of cohesion between the water and the glass was indicated by the weight required to raise the plate. As only a thin film of water is in actual contact with the plate, only a small portion of its cohesive force is exerted. The weight required to lift the plate from



the water is, in fact, equivalent to the cohesive force existing among the particles of water themselves. Dr. Faraday did not mention the exact force necessary to lift a plate having an area of twenty-five inches, but the number of ounces is surprisingly great.

M. Henry has made the discovery that the boiling point of water may be raised from  $212^{\circ}$ , its ordinary boiling heat, to  $275^{\circ}$ , simply by so treating it that all its air shall be expelled. Were it not for the air contained in water, this fluid would not boil at  $212^{\circ}$ ; and when ebullition did take place, the boiling would be like that of concentrated sulphuric acid, turbulent and attended with no little danger. It is therefore the air always present in ordinary water which renders the boiling process tranquil and safe. When the boiling point is raised to  $275^{\circ}$ , the temperature is equivalent to a pressure of three atmospheres. It is unquestionably the cohesive force of the particles of water among themselves that enables them to resist so high a temperature. This same force we see continually exerted in all those cases in which the liquid is repelled by the surface of solid bodies, where we find that it uniformly assumes the shape of globules. The dew is seen adhering to the grass and leaves in "pearly drops," globular in form.

Dr. Faraday still further illustrated the subject of cohesion by pouring water into a small cylindrical vessel composed of copper wire-gauze. The water remained in the basket as though it were not perforated by countless holes until, by shaking, the force of cohesion was overcome by the power of gravitation. A cup of wire-gauze, with very fine meshes, was next heated to a red heat, and some water poured into it; so long as the heat was preserved the water rolled over the surface, but the moment the temperature was reduced, the water began to escape through the meshes, forming, at the same time, a large quantity of steam. The lecturer alluded to the fact long known, that water may be kept upon a very hot surface without boiling, or generating steam in any appreciable quantity. He poured some water on a

plate raised to a white heat, and it rolled about as a globule of quicksilver would do, producing, so far as the eye could discover, no steam. This water was prevented, by a stratum of dry steam, from coming in contact with the heated surface, and had a temperature really below that of boiling and only  $105^{\circ}$  Fahrenheit. By cooling the surface to a certain point, contact between it and the water is induced, and then the latter passes off in volumes of vapor. Dr. F. substituted sulphuric ether for water, and the same result was obtained, except that the effect was more brilliant, from the ignition of the ethereal vapor, in the midst of the flame of which a globule of the liquid was seen dancing over the heated surface, but not actually touching it. When the vessel was somewhat cooled, the ether coming in immediate contact with it, a much larger quantity of vapor was formed, and an increase in the size of the flame took place, showing even more clearly than the former experiment, that at a very high temperature the fluid is repelled from the surface of the heated plate. This is termed the *spheroidal state* of liquids, and it is on this principle that Boutigny froze water in a *red-hot* crucible.

Dr. Faraday repeated this experiment in the following manner:—into a red-hot crucible he poured a quantity of anhydrous sulphurous acid, to which he added subsequently an equal quantity of water. According to the law to which I have just alluded, no contact could exist between the liquids and the heated surface, and the sulphurous acid, boiling very rapidly at a temperature of  $14^{\circ}$  Fahrenheit, produced so much cold as to freeze the water. The water was hardly added before a lump of ice was turned out of the crucible, the water being frozen by the boiling of the acid. Anhydrous sulphurous acid becoming spheroidal at so low a temperature, it is not necessary to heat the crucible very hot, since the temperature of all liquids in the spheroidal state is a few degrees below their boiling point.

The last, and by far the most brilliant experiment of the

evening, was one which the learned professor performed for the first time before the public on that occasion, and consisted in freezing *mercury* in a red-hot crucible. This he effected by the following simple arrangement:—having heated a platina crucible to the requisite temperature he dropped into it a few lumps of carbonic acid, and added a quantity of sulphuric ether; thus he obtained a freezing mixture in a spheroidal state, equal in the air to a cold of  $160^{\circ}$  below the zero of Fahrenheit. The ethereal vapor was not inflamed, although the crucible was red-hot. A ladle, containing a globule of mercury, was now immersed in this mixture, and in a short time taken out with the quicksilver as solid as a leaden bullet. A more beautiful experiment one could hardly hope or desire to see. Very many of Dr. Faraday's intelligent looking audience were ladies, who during the evening manifested the liveliest interest both in the remarks and the experiments of the professor. I felt myself surrounded by the pure, the refined, and the great of London, and shall long remember the evening as one of the most delightful of my life. I saw Mr. Brande, a fine looking gentleman, and many other distinguished *savans* in the auditory.

I saw, yesterday, an examination of the body of a man whose case I had watched in the hospital with unusual interest. The patient, 42 years old, had suffered for nine months with difficulty in voiding his urine; his general health was gone; his physicians had diagnosed a lumbar abscess of very large size pointing towards Pourpart's ligament.

I was present when Dr. C. J. B. Williams, after a careful and acute examination, pronounced his disease an abscess of the kidneys. In a week or two afterwards he commenced expectorating pus, and died in a few days. The *sectio cadaveris* revealed an abscess of the left kidney, by which the whole of that organ, except a small part of its cortical substance, had been destroyed, and a lumbar abscess which involved more than one-third of the great psoas muscle. The matter from the kidney had made its way along

the vertebral column, through the diaphragm, and into the lungs, from which it was freely expectorated.

Mr. Ferguson, of King's College, is the most formidable rival Mr. Liston has in London. Like Liston he is by birth a Scotchman, and like him of a fine personal appearance, with an intelligent face, and great suavity of manners. He is about 38 years of age, and is in a fair way to attain greater eminence as a surgeon than he has already won. But it is as an operating and not as a lecturing surgeon that he is acquiring distinction; his powers as a lecturer would never raise him above mediocrity.

The London *Lancet* is out upon Dr. Elliotson with almost savage severity. As it will be sometime before you receive your copy, in order that you may see how doctors on this side of the great waters write concerning one another, I will give you an extract from an article which I read in a late number of that Journal.

"After a disappearance from University College and a long submergence in the depths of quackery, the mesmerist (Dr. Elliotson) made his appearance on the professional stage on Saturday last. He rises again to the surface not like the diver with pearls in his hands, but with the mud and weeds of the lowest depths about his brow—a by-word, a hissing and a reproach to his brethren. Does he himself treat the harlotry which he dares to call science with respect? Let the profession consider his allies and assistants, taken from the pert folly of the nobility,—the weakest among the literary people, high and low ladies, quack clergymen, itinerant lecturers and exhibiting bullboons. Look at that more than all-damning fact in the cases of this man, his violation of the sacredness of death itself, when he took the O'Keys to the beds of the dying in the University College hospital, and tortured them at the awful moment of dissolution by the half frenzied half hysterical ravings of these tricksters. And this is the man who dares institute comparisons between his own nothings and the great deeds of Harvey!"

Within a few days I have seen the thermometer in the shade as high as 93°. This would be accounted hot weather anywhere.

London, June 25th, 1846.

## REVIEWS.

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ART. V.—*Animal Chemistry with reference to the Physiology and Pathology of Man.* By Dr. J. FRANZ SIMON, Fellow of the Society for the advancement of Physiological Chemistry. etc., etc. Translated and edited by GEORGE E. DAY, M.A.&L.M., Cantab.; Licentiate of the Royal College of Physicians. Philadelphia: Lea & Blanchard. 1846.

On a former occasion, in a notice of the first part of this work, we expressed the high estimate in which we held it, and deem any further commendation of it at this time unnecessary. The second part which has just been published, and a copy of which has been sent to us by the publishers, completes the work, making a volume of more than seven hundred pages. The size of this treatise will be objectionable with many readers. It will require some resolution to sit down to a volume of such dimensions made up in great part of tables of analysis; but if not many will thus engage in its regular perusal, few, we should suppose, would be willing to be without it as a work for reference. The part just issued contains ten chapters and an appendix, which treat of the secretions of the chylopoietic viscera and the theory of digestion; milk; secretions of the mucous membranes; secretions of the external skin; the urine; secretions of the lachrymal, meibomian and ceruminous glands; secretions and fluids of the generative organs; the intestinal excretion; the component parts of the animal body; solid morbid products; fluid products of disease. Besides these, many other subjects are

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LOUISVILLE, NOVEMBER 1, 1846.

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## FOREIGN CORRESPONDENCE.

PARIS, Sept. 16th, 1846.

*To the Editors of the Western Journal:*

GENTLEMEN—In the following letter I shall give you such detached items of information as I have had opportunity to acquire during my short residence in this city, trusting that in my future communications I shall be able to observe more system. Among the many distinguished medical men of the French metropolis, Velpeau was one whose lectures I was most anxious to hear. I had the pleasure of listening to his last cliniques at the Charity Hospital, and an outline of one of these I have attempted to give. I like him as a lecturer; his style is good; viz: plain, and unaffected; his matter is excellent, his remarks sufficiently practical and succinct. I promise myself great pleasure and profit from attendance upon his course, which begins in November and continues during ten months. Velpeau is between fifty and fifty-five years of age, of ordinary stature, and of a peculiar expression of face. His hair is beginning to be gray, while his eye-brows are perfectly black, large and heavy, and, hanging over light hazel eyes, a little sunken, give to him this ex-



pression. He is at the Hospital of Charity, and is followed, during his visits, by crowds of both French and American students. He begins these at 8 o'clock in the morning and finishes at 9, when his lecture commences, which continues about an hour. My breakfast hour is now half-past 10 o'clock. In the winter, when the days become shorter, the student, who would be regularly at his post, must rise, dress, and breakfast by candle-light; and he who does this for half the year, most assuredly "scorns delights and lives laborious days."

*Hopital de la Charité—M. Velpeau—Erysipelas.*—There are many points worthy of mention both in the theory, nature, and treatment of the disease called Erysipelas. Since the time of Franck physicians have contended, and M. Chomel has been singularly warm in his advocacy of the opinion, that erysipelas of the head is always preceded by engorgement of the submaxillary ganglia. The evidences which they advance in support of this theory do not appear to us to have been seen in their true light. We regard the ganglionic irritation or engorgement as an effect, a consequence, rather than a cause or precedent of erysipelas. There are numerous instances on record where erysipelas has traversed the scalp and reached the face unnoticed, and we think it risking nothing to say that these are the cases where engorgement of the submaxillary ganglia is settled upon as the cause of the disease.

We endeavored to show in a previous lecture, and we shall return again to the subject, when speaking of diseases of the glandular system, that this mode of regarding the gang. engorge. which is observed in erysipelas agrees in every particular with the manner in which engorgements of the ganglia in general are produced.

In our opinion the idea of the pre-existence of ganglionic engorgements in erysipelas is an error arising from this obvious cause, to-wit: that the first stages of the disease pass unobserved and undetected, while in reality the tumefaction of the ganglia follows the cutaneous inflammation. This remarkable circumstance is connected with the treatment of this disease. There is no mode by which it is arrested; every topical remedy has been applied without seeming to diminish its duration or limit its extent. Mercurial ointment, hog's lard, ointment of calomel, sulphate of copper, diluted acid, nitrate of silver, on which a vast deal has been said, and to the consideration of which an

American physician has even devoted a whole volume—blisters, sinapisms, etc., all have been tried, and all have failed.

We have met with but one application which has appeared to us to possess any value in the treatment of erysipelas; that is the ointment of sulphate of iron.

Sulph. iron 8 ä 10 grammes.

Lard 30 ä 40 grammes.

If you prefer it in the form of solution, add 10 grammes of the sulphate of iron to 100 grammes of water. Compresses saturated in this mixture are to be laid upon the skin.

This salt has evidently some action on erysipelas; the parts over the integuments with which it is placed in contact become white and shrivel up; though it does no more towards circumscribing the progress of the disease than any other compound. As a remedy, therefore, it is not entitled to much attention. In many cases the general symptoms of erysipelas will continue unabated and even increase after the entire disappearance of the redness, a fact too clearly pointing to the conclusion that it is a constitutional affection, and hence beyond the reach of all topical applications.

And although we are disposed to believe that the sulphate of iron has been occasionally used with advantage, we would have it distinctly borne in mind, that a general remedy is what we want and what has not yet been discovered.

We proceed to mention a striking result, which seems at first to be rather the effect of caprice. Out of five patients who were admitted into the hospital for erysipelas not one has died, and among fifteen who were seized with the disease while lying in the wards, the enormous proportion of eight have died. This difference of mortality is most surprising, and as easily accounted for.

The five patients who were brought to the hospital laboring under erysipelas were suffering under this disease alone, and notwithstanding we admit that even under such circumstances as these patients sometimes die, the termination of the attack is very generally in recovery. What now are the facts in relation to the fifteen individuals whom erysipelas seized while inmates of the hospital wards? Every one was enduring disease in some shape or other; some had submitted to operations; one had peritonitis; another pneumonitis; and others

again were exhausted by suppuration in different parts of the body.

The fate of these patients, therefore, must be ascribed as much to the maladies under which they labored at the time that erysipelas supervened as to that affection itself.

It must be received as a law equally in medicine and surgery, that erysipelas, existing in complication with other diseases, is always a most serious and frequently a fatal disorder—if not so in itself, at any rate on account of the grave concomitants amid which it is developed. In hydrocele M. Velpeau is particularly partial to iodine injections.

When the rumor that Asiatic cholera had made its appearance in London reached Paris, the Academy of Medicine despatched two of its members to that city in order to study the disease. At one of the meetings of the Society of Practical Medicine held soon after, great wonder and astonishment were expressed by various learned gentlemen who were present, that the Academy had been guilty of so great a blunder. They were confident that Paris afforded equally as fine a field for the investigation of cholera as London. Six of the members of the Society had met with cholera this season too clearly developed to be mistaken. Some had had several cases. The symptoms were vomiting, colorless alvine evacuations, cramps, coldness of the extremities, coldness of the whole surface of the body, with the blue tinge of the skin, sunken eyes, and suppression of urine, which latter symptom existed for thirty-six hours in one instance. The treatment pretty generally consisted in opiate draughts, laudanum and starch injections, frictions, sinapisms to the extremities, cataplasms to the abdomen, and very small quantities of fluids to drink for fear of inducing vomiting.

*M. Belhomme*, who introduced the subject, had practised venesection in a case which he was called to. He first ordered the draught and injection, frictions, etc., and in twelve or fifteen hours after, when some amelioration of the symptoms was observed, venesection was performed, and the next day the patient, a woman of fifty-three years old, had entirely recovered.

In the Medical Gazette of Strasbourg it is stated that the cesarian operation was performed with entire success by Dr. Steinbrenner, on the 15th of January last. On the first of March both mother and child were doing well.

The journals from India of the 15th of August speak of the ravages of the cholera. They also state that an English physician, Doctor Ballguer, has discovered a remedy for this terrible disease. Patients to the number of fifteen had been relieved through his instrumentality. The treatment is simple, consisting in the use of a bath of medicated vapor. This scourge has set its foot in Persia. Teheran has been deserted by the king, his ministers, and the entire court. The diplomatic corps is preparing to follow the example. The journals admit that the disease is communicated by the air. They fear that it will pursue the same track that it did in 1832.

A lad, aged 18 years, fell not long since upon his hands from the fifth round of a ladder upon which he was standing, which resulted in the fracture of the first metacarpal bone of the left hand. Crepitation, with shortening of the bone, contraction of the muscles, etc., characterized the case. Three longitudinal compresses, paste-board splints, and bandages sufficed, in the space of a month, to produce re-union of the bone. This is the only case on record where so small a bone has been fractured by such a force. The power which produced it acted as a lever of the second kind. D. W. Y.

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#### NEW MEDICAL SCHOOL.

Among the acts passed by the last legislature of the State of New York, was one incorporating the University of Buffalo. The trustees have organized the Medical Department of the University by establishing seven professorships, and the election of the following gentlemen professors: James Hadley, M. D., Professor of Chemistry and Pharmacy; Charles B. Coventry, M. D., of Physiology and Medical Jurisprudence; James Webster, M. D., of General and Special Anatomy; Charles A. Lee, M. D., of Pathology and Materia Medica; James P. White, M. D., of Obstetrics and Diseases of Women and Children; Frank H. Hamilton, M. D., of Principles of Surgery and Clinical Surgery; Austin Flint, M. D., of Principles and Practice of Medicine and Clinical Medicine.

This list embraces the entire Medical Faculty of Geneva College, with the exception of Dr. Thomas Spencer. We learn that the professors have accepted their appointments with the understanding, that the course of lectures shall be delivered after the course at Geneva has closed, which is about the first of February. The school at Geneva remains as it was; the lectures in it will go on as they have done heretofore, and the course at Buffalo will follow in a different period of the year.

## FACTS FROM CORRESPONDENTS.

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### CASE OF PREMATURE DEVELOPMENT OF THE MAMMARY GLANDS.

We are indebted for the following facts to Dr. JOHN DAWSON, of Jamestown, Ohio:

To-day, (July 30th,) Mrs. M. presented her daughter to me for an opinion as to its condition. The child is a female, nearly three years of age. It has had good general health since its birth; is of light complexion, with fair hair, and rather dark eyes; is of about the usual stature of children of its age; and is the only child the mother has ever borne. Some time since, its *mammary glands* commenced being developed, and they are now about the size of large oranges, apparently well proportioned, both of the same size, with *nipples* similar to those of young ladies at the age of puberty. Neither by inquiry of the mother, nor by my own examination, could I detect any other premature development, either of mind or body.

### CONGENITAL DROPSY—(ASCITES.)

This case was that of a female child nine weeks old. I saw it October 25th, 1844, when the mother informed me that, at its birth, the abdomen seemed to be unusually protuberant, and that shortly afterwards it became subject to paroxysms of restlessness and crying, for which anodynes were administered without producing any relief. At my examination the general system was not emaciated, nor was there any anasarca of the extremities. The skin was rather soft and moist. It sucked heartily; had more thirst than natural, and had a slight coat upon the tongue. The abdominal tumor was so great as to extend down over the pubis and also upwards and backwards over the ensiform cartilage and false ribs.

I prescribed diuretic and purgative medicines, and directed iodine ointment to be rubbed on the abdomen twice a day. No amendment followed this prescription. The child fell into the hands of another

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.* By  
DAVID W. YANDELL, M.D., of Louisville, Ky.

Of the living chemists of France the names which would occur first to an American, are those of M.M. Orfila and Dumas, the latter distinguished for his contributions to organic chemistry, and the former for the zeal and success with which he has studied the subject of poisons. I have had the pleasure of hearing both of them lecture. A fortnight ago I listened with great interest to a lecture of an hour and a quarter's length by Orfila, who, as you are aware, is professor of medical chemistry in the *Ecole de Médecine*. The room in which he lectured is an amphitheatre, capable of containing five hundred persons and upwards; the seats are without backs, and the whole appearance of the room is decidedly plain. It is said that more students attend Orfila's course than that of any other professor in the school. The morning on which I



attended him his room was crowded to excess. The rush of the students, who were not admitted until a few minutes before the hour of the lecture, was as great as that which has so often made the Institute building to shake again; but the shouts were not heard. The venerable, commanding, and intellectual looking professor made his appearance just as the clock struck half past ten, the hour for commencing his lecture, and was received by the class with considerable clapping of hands; I did not hear a foot stir. Orfila cannot be less than fifty-five years old, if he is not sixty; his head is bald over the whole of its upper half, while the back part and temples are covered with thick, nearly white hair. He is but a line under six feet in height, of fine form, and in every way a man of striking appearance. His head is ample and well formed, his eyes black, his nose Grecian, his mouth large and expressive. A better lecturer than Orfila one will not often hear on any subject. With his fine person, large, penetrating eye, clear, strong voice, and earnest manner, he makes an impression upon his hearers which does not speedily pass away. He is emphatically an earnest man; his countenance, voice, gesticulation all testify to that essential attribute of the orator. While lecturing he walks from end to end of his long table, his experiments being performed by assistants, of whom there were three the morning on which I attended. Three assistants were too many by two, at least for this lecture, and as a consequence some glass was broken, and one experiment was a failure. There are few things which too many hands do not spoil. The apparatus exhibited during this lecture was plain, and not as well kept as it might have been.

The lecture was professedly on oxygen, but half of it was devoted to electricity. Among the experiments pertaining to the latter subject, I may mention the dazzling one of igniting charcoal points by the electricity of a galvanic battery. This experiment succeeded well when performed in the atmosphere, but when attempted under water it could not be called any thing but a failure, which was owing to the awk-

wardness of one of the assistants, who did not bring the points properly in contact. The oxygen used in the lecture was obtained from the black oxide of manganese, and also from water by the action of the galvanic battery, as is now done in every course on galvanism. No experiment was performed which I had not witnessed before in Louisville, and all that Orfila did in this way was, simply to immerse a taper in the bottle containing the oxygen to demonstrate its presence, the rest being left to his assistants. At the close of every division of his subject the professor drew from his pocket a silver snuff-box, took a pinch of snuff, replaced the box, used his handkerchief, and then continued his discourse. I have repeatedly heard him since in his tri-weekly course, but, although always interesting, he has said nothing yet new to me, or which, I suppose, would be new to your readers. I promise myself great advantages from his lectures on poisons, a branch of chemical science in which he is unrivalled, and when he reaches that part of his course I may be able to report something of interest.

The students in attendance at the School of Medicine are a well dressed body of, generally, quite young men; among whom there are many who are well favored, but not a few who are the reverse; some are of good size, but many, the majority, are small. They sit with their hats on, are very attentive, and in Orfila's theatre, made no noise, except at the appearing of the professor, and at the close of his lectures, when there was a clapping of hands, but not a single stamp. I saw several students taking notes, and many more who would have done so if they could have commanded the elbow room. It would not be a bad plan to construct all lecture rooms after the fashion of those in London, with boards on the backs of the seats, which serve as desks for writing; for unless a student takes notes upon what he hears he is not likely to remember much, and if he postpones doing so until he reaches his room, besides the time which it would require to bring his notes up, he is not apt to feel much inclination towards the task. The hardest, and the best informed students of my acquaintance

at home, in England, and in France, are those who are most industrious with their pens or their pencils.

Orfila paid a visit, not long since, to Spain, and while there wrote home some interesting letters concerning the state of medical science and medical education in that country. From one of these letters, which appeared a day or two ago in the *Gazette Médicale*, I learn that nine years are necessary to prepare a student for the title of Doctor of Medicine, and that he must study seven years before he is entitled to a diploma, which confers upon him the right to practice in Spain, but does not make him eligible to any professorship. To an American this appears a long time, and few among us, I presume, would willingly enter upon such a probation.

At the meeting of the *Academy of Sciences*, on Monday evening, the 25th of October, among the numerous *savans* present, I was particularly struck with the appearance of Dumas. In the long hall of the Institute of France, in which the Academy holds its meetings every Monday, is a table of an oval form, divided near the middle of one of its sides by the chair and desk of the President, which extends from one end of the room to the other; members sit in chairs on the inside and on the outside of this table, and in addition there are chairs and other tables in the space formed by the oval. The accommodations for visitors are not ample, consisting merely of two rows of benches arranged on one side next the wall, one row on the other side, a few chairs and a little space for standing at the ends of the room.

I took a seat near the entrance in order to learn the names of the members as they entered from the obliging man, whose business it was to stand at the door and prevent persons from coming in after the seats were filled. I was looking about at the different persons present when my cicerone touched me, saying, "there, sir, is M. Dumas." I turned, Dumas was bowing most gracefully to his acquaintances and confreres as he passed them on the way to his chair, at the left hand, and in

front of the president. Seated, his appearance was striking, and his face and person agreeable. He is a young looking man, not seeming to be past thirty-five. In height he is about five feet ten inches, may be a fraction more or less; his hair is a glossy black, and towards its ends waved or inclined to curl; his complexion is dark; his head large; his forehead bold and high; his eyes, I should say, are dark, but whether grey or black, I was too far removed to tell; his nose is prominent and shows a tendency to the variety called 'hook;' his mouth, which is one of the most expressive features of his face, is well turned and emphatically that which belongs to a speaker.

His entire suit was black, save the white cravat which was barely seen above the collar of his velvet waistcoat, which buttoned straight up to his throat. The mark of the legion of honor, a red ribbon, was fastened to a button hole in the left lapel of his coat. He might have been mistaken for a young Episcopal divine. His voice is clear and resonant; his articulation distinct and sufficiently varied, and his manner while reading appropriate. I say while reading, because I only heard him read a paper. Of his style of lecturing, which I have heard so often and so highly praised, I shall acquaint you as soon as he commences his usual annual course early in the coming month. The subject of the paper, which he read before the Academy on that evening, was the conversion of sulphuretted hydrogen into sulphuric acid.

M.M. Humboldt and Boussingault have shown that the water of the Rio Vinagre which, near the volcano of Puraci, falls in a cascade of acidulous water, contains free sulphuric acid, as well as free chlorohydric acid. M. Dumas has made the production of sulphuric acid under these circumstances the subject of his investigation. He has established this general fact, that sulphuretted hydrogen mixed with air through the aid of porous substances, but especially of linen, and under the influence of a slightly elevated temperature, is slowly converted into sulphuric acid. This mode of combustion differs entirely from that which is observed when sul-

phuretted hydrogen is burnt in the atmosphere with the evolution of light and heat. In this latter case the products are water, sulphurous acid, and almost always a deposit of sulphur and traces of sulphuric acid. In the case of the slow combustion of the sulphuretted hydrogen, effected under the preceding conditions, M. Dumas has perceived that neither sulphurous acid nor sulphur have been produced, but that the only result has been the formation of sulphuric acid.

When, on the contrary, water containing sulphuretted hydrogen is exposed to the air, a slow combustion occurs here also, but water only is formed, and sulphur precipitated. The deposit which obtains in all sulphurous waters is a well known illustration of this. In many places he has had occasion to remark the sulphate of lime which had resulted from the action of sulphuric acid produced by the sulphuretted hydrogen. In all great cities, but more particularly in London, it has been observed that large masses of iron exposed to the air become eroded; and this change has been attributed to the presence of sulphurous gas in the atmosphere. This gas is supposed to result from the combustion of coal; though it is a question worthy of consideration whether the sulphuretted hydrogen exhaled from the numerous sewers does not contribute to produce the effect.

Sulphuretted hydrogen may slowly form sulphuric acid, and wherever there are substances upon which this may act sulphates result; thus according to M. Vogel and others, whenever alkaline sulphates are brought in contact with organic matter, sulphuretted hydrogen is produced; and whenever humid remains of plants are exposed to the action of sulphuretted hydrogen and the atmosphere, sulphuric acid and the sulphates will be re-formed. In the form of sulphates then, sulphur may travel through the air in its watery constituent to lands which need it either for the development of vegetables or animals. He thought the part played by yellow sulphur in the production of all the azoted portions of plants and animals was not unworthy of remark; on an average, the 100th part of their entire weight is sulphur. Thus ten



kilogrammes of dry azoted matter, which is about the quantity in a man of ordinary size, contain one hundred grammes of sulphur. To extend the calculation, two millions of kilogrammes is the representative number of the amount of sulphur contained in the population of France, and twenty millions of kilogrammes is the equivalent of the sulphur contained in all the animal creation of France.

I wrote the foregoing some days ago, immediately after attending a meeting of the Academy. Monday, the 16th of November, at 1 o'clock, Dumas delivered the introductory lecture at l'Ecole de Médecine. The court in front of the doors leading to the lecture-room commenced filling at half past 9 o'clock in the morning. The day was cold, the thermometer standing at about  $32^{\circ}$ , and the students who had assembled so early were obliged to walk about briskly to keep themselves warm. The crowd gradually augmented, and at half past 11 large numbers of medical and other students took their places at the two doors. From this time until a few minutes before 1 o'clock the influx was rapid, and the multitude began to evince signs of impatience and ill humor. As the clock struck one the doors opened simultaneously and the rush was tremendous. I was in the front rank, and had I not been trained to such races before I might not have escaped as well as I did. As it was, I obtained a seat upon the second row of benches, in a position from which I could see nearly the whole audience, and very distinctly hear the professor.

As, I presume, is the case always in a Paris lecture-room where seats are so much in demand, there was jamming, squeezing, bullying, cursing, and, what is so common among French students, *blackguarding* as we style it. Some tried to obtain places by sitting down in the laps of others, some by jumping in while others had risen up to see a contest going on in some other part of the room. The two doorways were full; the students who had been distanced in the race up stairs, now tried by pushing from without to precipitate



those who were standing, upon the backs and heads of their fortunate companions seated below; nor were they entirely unsuccessful, for several men lost their balance and fell forward, creating such confusion that the lecturer was obliged to make more than one long pause in his discourse. Considering that from seven to eight hundred students were crowded into a room calculated to seat about five hundred, there was a most commendable degree of silence and order, which, in fact, were never disturbed, except when some corpulent man was forced to cry out for quarters, or some light youngster was pushed from his place, and tumbled headlong upon his neighbors below him. Amid all the scuffle not a blow was struck; one man was kicked at the close of the lecture, and the quarrels were numerous, but they ended, as all the quarrels that I have witnessed in Paris have, in the most disgusting scurrility.

Dumas and the other members of the Faculty wore the black and purple robes. The eloquent discourse was read, and consisted principally of a eulogy upon Augustus Bérard, who died not long since loved and lamented by all who knew him—a loss to science, to France, and the world. Dumas was at times touchingly eloquent, and more than once was obliged to pause from emotion, as he was repeatedly compelled to do by the plaudits of his audience. His lecture was more than an hour long; it has been published in the *Gazette des Hopitaux*, and after having read it carefully I am prepared to pronounce it a most beautiful discourse, abounding in noble thoughts, clothed in the richest drapery. The annual distribution of prizes was made at the close of Dumas' lecture. The gentlemen to whom they were awarded came forward and received them at the hands of Orfila, but the *sages femmes*, although their names were announced, were not seen.

*Clamart* is the name of an establishment for dissection, having large, well aired rooms for this purpose, besides a theatre for lectures, and a museum. The subjects are fur-

nished by the hospitals. The museum contains comparatively but a small number of either anatomical or pathological preparations; but among these there is a considerable variety of curvatures of the spine, which are highly interesting and instructive. Among the preparations of the bloodvessels is one of irregular distribution of the arteries of the lower extremity, which may be regarded as not only unique, but important in its connection with surgical diseases and operations; unfortunately the specimen is not perfect, in as much as the aorta has not been preserved. One large arterial trunk follows the course of the posterior iliac, and furnishes to the pelvis the usual number of vessels supplied by that artery. The same great vessel then emerges from the sacro-sciatic notch a little to the outside of the deep or pelvian pudic artery; afterwards it pursues the course and accompanies the great sacro-sciatic nerve until they both enter the popliteal region, when its future connections and distributions are normal. You will observe that this great trunk represents, first the internal iliac, and afterwards the artery of the leg. It is natural to inquire in what manner the thigh was supplied with blood. On examining its anterior region, an artery of the thigh, the profunda, is seen, but its connection with the lower part of the aorta, from which evidently it had proceeded, is destroyed. This vessel, the profunda, appears to have followed the direction of the external iliac without sending off any vessels except the circumflex iliac and epigastric, until it had gained its usual situation in the thigh, when it divides in the customary manner. The internal circumflex is much smaller than common, and, as always occurs under such circumstances, the obturator is proportionally large.

Here is a case which I have watched at *La Charité*—it was gangrene of the left arm, and terminated fatally. The patient was a man 30 or 35 years old, a nailer by trade, had constantly enjoyed good health, and was never exposed to contact with animals or any portion of them, who had been affected with malignant pustule or *charbon*. The dis-

ease commenced with a small pustule over the deltoid muscle and was the seat of considerable anxiety, accompanied by severe itching which induced the patient to scratch until he broke it. He entered the hospital the fifteenth day of the disease; the pustule presented a black slough of one centimeter in diameter, and situated in the point first attacked. Immediately afterwards it increased much in volume, became indurated and surrounded by a phlegmonous circle. On the third day the whole limb was tumefied, red, hot, and painful. The swelling increased rapidly the two following days. Below the slough the limb was exceedingly tense and œdematous, especially in the region of the hand, and presented in different places livid spots.

The slough becoming gangrenous was cauterized with butter of antimony. The ensuing day the gangrene became more defined, and the wound was cauterized with the hot iron by M. Velpeau. This, however, did not arrest its progress; by this time it had extended almost as low as the elbow; the gravity of the symptoms continued unabated, shivering came on, followed by fever and other constitutional symptoms, with great anxiety in the precordial region, and diarrhœa. The limitation of the gangrenous eschar which now seemed to have occurred, induced M. Velpeau to amputate the limb at the shoulder joint, from which the patient appeared to suffer no pain. There was an apparent alleviation of the symptoms the first day; the pulse fell from 140 to 120 beats in a minute; but the day following difficulty of deglutition, a sense of oppression in the region of the heart, with cold, clammy perspiration, ensued, and soon the patient sunk, retaining his self-possession to the last.

The amputated limb when examined showed all the tissues involved by gangrene down to the bones. On inspection of the body nothing was observed except slight congestion of pleura costalis of the left side. A large fibrinous clot of unusual consistence occupied the right auricle and ventricle; the arteries and veins were unaffected. The existence of this coagulum is supposed to have been connected with the precor-

dial symptoms which constituted one of the most prominent and unpleasant features of the case. This is a brief report, but contains all that it seems to me was presented by the unfortunate and interesting case. I may mention that M. Jobert of *l'Hôpital St. Louis*, has lately reported a case of malignant pustule which is intimately connected with the gangrenous affection just noticed, in which the use of the red-hot iron was followed by recovery.—Frictions of the tincture of iodine have been recommended in inflammations of the *os uteri*, by Dr. Licherer of Heilbronn.

*On the Division of the Tendon of Achilles.*—Prof. Stromeyer has lately published the following propositions relative to the section of this tendon, which I find in the *Gazette des Hôpitaux* of the 12th of November:

1st. The separation should be performed with a small knife, the blade of which is slightly curved at the point and very sharp; the subcutaneous method should be employed, and but one opening made in the skin.

2d. The tendon must be completely divided or the operation will not be successful.

3d. When the other muscles, or the plantar aponeurosis are retracted simultaneously with the tendon, they must be divided before the section of the latter is made.

4th. After the operation, compressions are applied to the wound by means of the figure 8 bandage.

5th. Among adults on the fourth or fifth day of the operation, and among infants on the third or fourth day, the first dressing is removed, and if it is found, as is generally the case, that the little wound is healed, you proceed to make extension; this is never to be resorted to while the wound suppurates or any considerable degree of ecchymosis exists.

6th. The limb is bandaged and properly protected from compression, before the foot is placed in the machine for extension.

7th. Extension is performed gradually and gently, and diminished whenever the patient complains of pain.

8th. In order to avoid excoriations, erysipelatous inflammations, and mortification of the tissues, the dressings should be removed whenever the patient feels any severe or continuous pain in the points under pressure.

9th. When the dressing is removed the limb should be covered with flannel.

10th. It is known that individuals who have submitted to the operation in question experience a sensation of cold and numbness, which is sometimes limited to the heel, and in some instances extends throughout the whole of the foot; this sensation diminishes gradually, and disappears ordinarily on the sixth or eighth day.

11th. The first or second day of the operation, although the individual may not have been subject to sweating of the feet, the foot which has been operated upon gives off a viscid exudation of a disagreeable odor.

12th. In placing the foot in the machine for extension it must form a little more than a right angle with the leg, and be kept in this position for eight days. After this period the foot must be wrapped with a circular bandage, and the patient must be allowed to make no attempts to walk before the fourth week; without this precaution the member will become swollen, the cicatrix will be irritated, and perhaps even the newly formed tissues destroyed.

13th. It is impossible to define the exact duration of the cure; this will depend on the state of the patient, the degree of the deformity, and the extensibility of the articular ligaments.

Dr. Moij'Sisovics, first surgeon to the imperial hospital at Vienna, has addressed to the Academy of Medicine, at Paris, a work entitled "An account of a sure and speedy method of treating Syphilis, by the preparations of Iodine." The author wishes the Academy, through a committee, to investigate what he has announced, and make a report on his work.



situation in which it must have perished. Hence when convulsions happen to women who have gone the full period of gestation, it is no uncommon thing to save the child by delivery, when we are unable to save the mother. This was done in our fifth case.\* Here the parts were in a favorable condition, and the woman had gone to full time; the forceps were applied when the tendency to convulsions was first noticed. Before, however, the child was delivered, the convulsion had made its advent. The woman died in the second convulsion, but the child was saved.

In concluding our remarks on the treatment of this malady, we submit the following positions:

1. Each case of the disease is likely to have some peculiarity, and therefore requires discrimination in regard to the selection of remedies.

2. Bloodletting is not only the most general remedy, applicable to almost all cases, but it is also the most valuable.

3. The extent to which depletion should be carried will depend not so much on the violence of the convulsions as upon the habit of body, strength of constitution, etc., of the patient.

4. Opium, emetics and cathartics have considerable value as auxiliaries.

5. Delivery by art is a measure of great value, but should never be performed without strict regard to both mother and child.

Jamestown, Ohio, February 10, 1847.

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\* Dr. Winans introduced the forceps and delivered the child in this case. It happened that the fit came on before he had succeeded in applying the instrument, at which time he had an opportunity of observing the effect which it produced on the uterus. Instead of the regular contractions, the organ, he observed, fluttered around his hand, and had imperfect irregular contractions.

ART. II.—*Notes on Medical Matters and Medical Men in Paris.* By DAVID W. YANDELL, M.D., of Louisville, Ky

I spoke in a former communication of the use of some of the preparations of gold by M. Legrand. M. Ricord has been making, at the Hôpital du Midi, some experiments with gold associated with mercury, which, although too few to warrant any definite conclusions, still authorize the hope that it will one day become a highly useful remedy. M. Ricord believes that he has remarked in cases of constitutional syphilis, where he has administered the *chryso-hydrargyrique* pills, the symptoms yield more rapidly than under the mercury alone, without the supervention of any unpleasant accidents either to the mouth or digestive apparatus. He goes so far, indeed, as to insist that the gold, by its association with mercury, acts usefully as a prophylactic against salivation. The *modus operandi* of this amalgam is yet obscurely if at all known. On this subject there is a passage in a work published in 1757, entitled *Cours de Chimie de Lemery*, which, however, the able conductor of the *Gazette des Hôpitaux* pronounces purely hypothetical. Here is the passage: "Gold is a good remedy for those who have taken too much mercury, for these two metals readily unite with each other, and by this union or amalgamation the mercury is fixed and its progress interrupted. This is well seen in those who have received frictions of mercury, who, if they hold a piece of gold in their mouths for some time, find that it is whitened from the vapor of mercury." The *Gazette* thus comments upon this: "We have had very lately occasion to treat a patient who had been intensely salivated by a feeble dose of iodide of mercury. A piece of gold well polished was placed in the patient's mouth, where it was allowed to remain during more than half an hour; on being removed, its color was not in the slightest degree changed." Until more ample information is attained upon the subject, the mode in which gold acts, in the cure of disease and in preventing salivation, must remain a matter of

conjecture. The amalgam alluded to consists of fifteen parts of mercury to one of gold. The pills, containing from two to three grains of this, are given morning, noon and night.

M. Nélaton communicated, not long since, an extremely curious fact observed by himself in a young epileptic girl, and which, it has been remarked, is without a parallel in the records of medicine. The patient received a blow from a stone on the eye, which contusion was followed by the formation of a traumatic cataract. After the development of the cataract, she became the subject of epileptic fits. Each time that she felt these symptoms, and a few moments before their occurrence, she experienced in the eye a very perceptible pricking, a true *aura epileptica*; and it seemed to her that the general affection, which terminated in the epileptic fit, commenced at the eye. M. Nélaton extracted the crystalline body; the sight was restored to that eye, and the fits ceased. Afterwards, but a long time subsequently, as M. Nélaton has learned, the girl became the subject of mental aberration.

M. Jobert, of St. Louis Hospital, of whom I had occasion to speak in a former letter, makes frequent and successful application, in rheumatism, erysipelas and some other affections, of nitrate of silver in the form of an ointment, varying in strength from four and eight to twelve grammes of nitrate of silver to thirty grammes of lard. (A gramme is 15.444 grains Troy.) The following are a few of the cases in which this ointment was used with the most satisfactory results:

*Observation first.* A man forty-three years old wounded himself in the anterior part of the right leg, with a hatchet. The wound was suppurating at its edges and around them for some lines. The skin presented a manifest erysipelatous blush when M. Jobert saw the patient. The constitutional symptoms were general uneasiness, anorexia, full, hard and frequent pulse. Ordered lemonade, simple dressing to the wound, and application around its whole extent of the ointment of nitrate of silver. The next day the erysipelas had

invaded no other region; the local pain and general phenomena were somewhat diminished, but the patient passed a sleepless night, and complained of having felt a lively pain at the internal part of the thigh and groin of the wounded side. The day following, all the symptoms were detected which characterize lymphatic inflammation; the rose-colored bands, sinuous and multiplied at the internal part of the leg, and corresponding to the course of the lymphatic vessels; little erysipelatous wounds corresponding to the more superficial lymphatic ganglia here and there interrupted these lines or bands, and in the same points there was pain, and a cylindrical, fusiform tumefaction, corresponding to the vessels, or to the inflamed ganglia; and finally, the inguinal region of the same side presented many lymphatic ganglia, swollen, and painful upon pressure. M. Jobert ordered all the points which were either red, tumefied or painful, to be anointed with the pomade of nitrate of silver. The next morning, the 15th, the patient said he had passed a better night, and affirmed that the pain which he had felt was sensibly diminished; notwithstanding which, during the days following three other applications of the ointment were made, in order completely to subdue the inflammation and hasten the resolution of the engorged tissues. On the 20th, every complication had disappeared, the wound presented a healthy aspect, the appetite had returned, and the patient was able to be up a little every day. There was a small piece of skin cut by the blow of the hatchet, and left hanging by a slender pedicle, which, notwithstanding the erysipelas, was preserved, and ended by contracting adhesions; but the complete cicatrization of the wound was delayed some weeks longer, when the patient left the hospital perfectly restored, with the inguinal ganglia of the right side no more voluminous or sensible to pressure than those of the left.

*Observation second.* A laborer, æt. forty-eight years, whose right foot had been wounded, presented the following condition: considerable tumefaction, large collection of blood on its dorsal face, and two wounds, one situated at the base of the

third toe, the other near the external border of the foot, about two inches in front of the external malleolus. Emollient cataplasms were applied around the foot, which, in addition to venesection, were repeated the next day. On the 13th, the cataplasms were replaced by compresses saturated with camphorated brandy. On the 14th, an erysipelas occupied the dorsal surface of the foot, and had already invaded the inferior part of the leg. A single application of the nitrate of silver ointment sufficed to calm the pain and limit the erysipelas to the parts already mentioned. On the 18th, new symptoms were observed: on the skin of the internal part of the right leg red ribbons, sinuous, very painful to the touch, which gave the sensation of small cylindrical cords, appeared; the ganglia of the groin of the same side were swollen and painful upon pressure. There existed now very evidently in this patient inflammation of the lymphatics and inguinal glands. M. Jobert ordered the ointment of the nitrate of silver to be applied along the whole course of the lymphatic vessels, and upon the ganglia. On the 19th, the pain felt in the groin and thigh had diminished so much that the patient, deprived of sleep the night before, had been able during the last to repose many hours. The pain and swelling of the lymphatics continued rapidly to disappear until completely gone; but the ganglia, although wholly indolent, still preserved a volume a little greater than natural. Dec. 1st, the patient ate and slept well, his general condition very satisfactory. On the 2d, M. Jobert discovered upon the course of the lymphatics three small abscesses, the first situated below the internal malleolus, the second at the internal and inferior part of the leg, the third at the internal and inferior part of the thigh. The introduction of a bistoury was followed by the escape of phlegmonous pus. On the 3d, two other small abscesses were seen, which were similarly opened; one was situated at the internal and superior part of the leg, the other behind the internal condyle of the femur. These five wounds, resulting from the opening of as many little abscesses, were dressed simply. On the 13th, the two wounds on the back of the foot, produced by the accident,



were not yet cicatrized; on examination, it was perceived that the skin which separated them was coming away, and that there was already a fistulous communication. M. Jobert introduced a canula, incised the skin, and formed the two wounds into a single one. 19th. For some days the wound on the back of the foot is seen to be cicatrizing; this was favored by touching it with a pencil of nitrate of silver; simple dressing. As to the other small wounds, they are cicatrized; some are still covered with scabs. The lymphatic ganglia of the right groin remain slightly engorged, as is quite manifest to the touch. 27th. The dorsal face of the foot offers a completely continuous and solid cicatrix. The patient has commenced to get up and walk; but the various lesions that he suffered, and especially the repose upon bed that was enjoined, sufficiently explain the slight difficulty which he experiences in movements of the tibio-tarsal articulation of the right side—a difficulty which, without doubt, will disappear after sufficient exercise.

Independently of the interest attached to these two observations under the light of the treatment used, the inflammation of the lymphatics noticed in the subject of the second, presented a remarkable termination. We know that the first effect of inflammation of the lymphatic vessels is the coagulation of the lymph. Generally this lymphatic clot diminishes, is absorbed, and the vessel preserves its calibre. Sometimes the greater part of the fluid of the coagulum is absorbed, the solid part condenses itself in adhesions to the walls of the vessels, and thus obliterates them. At other times again, but more rarely, lymph accumulates at different points, distends the parietes of the vessels, coagulates and adheres there; then these coagula, instead of completely disappearing or of condensing themselves, soften from the centre to the circumference, and furnish pus. Thus result, at different points, and along the course of the lymphatic vessels, true abscesses of small size. We have seen, in the first case, that the patient arrived at the former of these terminations, which of all is the most common and happy; that is to say, that the coagula

were absorbed, the vessels preserved their calibre, and the lymph resumed its course. In the second case, on the contrary, the lymphatic inflammation terminated by numerous little abscesses, though the formation of the pus, preceded by adhesions of the clot, was followed by no grave accidents: in fact, pus when thus limited is unable to penetrate the current of the circulation.

*Observation third.* A man, after severe walking and excessive fatigue, was seized with pain in the tibio-tarsal articulation of the right side, and being taken to St. Louis Hospital, his case was pronounced arthritis, with considerable collection of serum about the joint. Anointments with pommade of nitrate of silver were ordered, and after being persisted in for three weeks, the patient left the hospital perfectly cured.

*Observation fourth.* A man entered the same service to be treated for lupus situated at the inferior part of the left leg. During his sojourn at the hospital he was attacked with a violent erysipelas, which rapidly extended over the leg, thigh and buttock of the side corresponding to the lupus. The nitrate of silver was applied by M. Moissenet; the invasion of the erysipelas was arrested, its extent limited, and speedily all the inflammatory symptoms completely disappeared.

*Observation fifth.* A young man was attacked, in March, 1846, with acute rheumatism of the right femoro-tibial articulation, the symptoms of which were so well marked that no doubt could be entertained of the nature of the affection. He was treated energetically by antiphlogistics, and then by sulphate of quinine; notwithstanding which, although the treatment was continued fifteen days, the disease did not terminate by resolution, and some days later the following phenomena were observed: The knee presented considerable tumefaction, and a sensibility so great that the slightest pressure produced the most acute pain; there was flexion of the leg upon the thigh, and the knee exhibited a manifest deformity; the superior extremity of the leg was carried outwards, and the skin was of a violet red. To the touch a sensation was imparted as of foreign bodies contained in the articulation in the midst

of a liquid; an exploring puncture proved this to be of a sero-sanguinolent nature.

A white swelling in its commencement was diagnosed, and treated by cauterization and vesicatories, without any amelioration of the symptoms. The nitrate of silver ointment was now used for about fifteen days, when the local symptoms were so greatly diminished that the patient got up and commenced walking without the use of crutches, and continued rapidly to improve until the articulation recovered its form, volume, and healthy movements.

M. Petzold, of Fohrenberg, in an article on the treatment of intermittent fever among very young children, suggests nothing which is not familiar to American physicians, save, probably, his formula for disguising the taste of quinine, which may be of some value:

℞. Clarified honey, 45 grammes;  
Sulph. quinine, 75 centigrammes;  
Aromatic sulphuric acid, dilute, 4 grammes.

Mix the ingredients thoroughly, of which a teaspoonful is to be given every two hours, shaking it previous to administration. Even this honey will still retain a little bitterness, though children usually take it without any great repugnance. For very young children, the sulphuric acid may be replaced by common water. One or even two teaspoonfuls should be administered every hour during both night and day to children of some size.

*Remedy for Toothache.*—To a hundred grammes of sulphuric ether, in which as large a quantity as possible of camphor has been dissolved, add two or three drops of ammonia; thus is obtained a camphorated ammoniacal ether, which, if applied to carious teeth, immediately relieves the pain. M. Cottereau, who is the author of the preparation, has used it in great numbers of cases with invariable success. The ether evaporates so rapidly that a layer of camphor is left in the dental cavity, which, although too light to incommode as a foreign body, is

sufficient to protect the denuded nerve from the air. Besides this, the ammonia acts as a cauterly. The solution should be kept in a perfectly closed glass bottle.

Although M. Récamier published the result of some researches on hydatids of the liver as early as 1825, it is in an inaugural dissertation of M. Barrier that we find the complete history, and the establishment, after numerous facts, of the symptomatology, march and termination of this affection. An interesting case of opening of a hydatid cyst into the intestine occurred a short time since in the service of M. Vigla, at the Hôtel Dieu, a rapid and succinct analysis of which may not be out of place. A man 28 years old, of good constitution, lymphatic, has been troubled three or four times in the space of two years with very violent colic, from his description of which it seems much like bilious colic, each attack of which lasted from four to five days, and terminated without any other treatment except rest in bed, diet, and emollient applications to the abdomen. Fifteen days ago he had an attack more violent than any of the preceding, for which he entered the hospital, where the pains augmented in intensity during the early part of his stay, became more acute upon pressure, and were felt especially over the liver; while in the right hypochondriac region, and under the inferior border of the false ribs, a tolerably voluminous, deeply seated and resisting tumor was observed, around which the abdominal parietes, although tense, were smooth and not sensibly elevated or distended by their contents. One morning, after a paroxysm of the most violent pains, the patient was seized with a copious diarrhœa, and almost immediately found himself relieved of all symptoms of disease. The matter which he had passed, preserved and presented at the visit, contained a great quantity of membranous pellicles, opaline, of different sizes, which on an attentive examination were soon recognised as hydatid remains. The next day and the day after, the colics were renewed, and each time followed and relieved by the expulsion of similar matter in large quantities, accompanied by a mucous diarrhœa.

In the space of three days, these accidents were repeated five times, and uniformly terminated in the same way. To-day the patient is in a satisfactory state, complaining of no more pain; the tension of the abdomen has diminished, and the deep-seated tumor, detected at first when the abdominal walls were depressed, is now no longer to be felt.

There had evidently been here a hydatid tumor of the liver, which discharged itself into the digestive tube. According to the light furnished by pathological anatomy and the results of post mortem examinations in analogous cases, we are forced to admit the existence of adhesions which were formed between the walls of the cyst and those of the intestine; which leads to the inquiry, to what part of the intestine were these adhesions formed, and into what part of the digestive tube did the tumor open? It is possible for this to be either in the large or small intestines, and the transverse portion of the colon is but a small distance farther from the liver than the duodenum. As a characteristic symptom, there is nothing to determine the diagnosis, while at the same time there are circumstances which militate in favor of the one opinion rather than the other. In considering the relations of the small intestine with the liver, we see that it was that portion of the intestine which corresponds to the point of the liver towards which the cyst had a tendency to transport itself—that is to say, the anterior and inferior portion. But the circumstance which induces us more readily to believe the opening of the cyst was into the duodenum is, that during the progress of the case entire hydatids were never met with in the stools, but only the remains of hydatid membranes. Now, cysts of this nature contain most frequently a greater or less number of these acephalocysts of every size; and if the cyst had opened into the colon, it would have been almost impossible for some of the least voluminous hydatids not to have passed entire with the discharges; whereas the length of the passage they were obliged to make, if the tumor opened into the duodenum, and the commencement of digestion, mixed with the chyme, the trituration to which the hydatids in the small intestine were necessarily



submitted, sufficiently explain the state of disorganization in which they were discharged. The patient is now (December 28th) in a satisfactory condition—a result hardly to have been expected, for, as remarked by M. Barrier, the issue of such cases is most frequently in death. The treatment must of necessity be simply palliative.

M. Briquet, in the treatment of chlorosis, uses sulphate of iron, because of its solubility, in preference to the subcarbonate of the same substance. The following is his method of administering the remedy: Sulphate of iron 1 gramme, distilled water 180 grammes; m. et f. dissolve s. a. Of this the dose is a tablespoonful morning and evening. Each spoonful contains seven centigrammes or about one grain and a half of the salt of iron. The above quantity of the solution is sufficient for daily administration for the space of a week. As to the subcarbonate, much larger doses of that may be administered; two grammes and upwards have been given without any unpleasant effects.

Dr. Guérard has been in the habit of employing with great success, in the chronic diarrhœas which accompany phthisis or enteritis, and which succeed typhoid fever, injections of the following: Common water 1 litre (about a quart English), nitrate of silver 50 centigrammes. Previous to adding the salt to the measure of water, it is easier to dissolve it in a small quantity of distilled water. The patient may without the slightest inconvenience retain or discharge the injection that has been administered, the effect of the argentic salt being the same in either case. M. Guérard has had no occasion to deplore unpleasant accidents from its use.

I promised, in my communication by the steamer of the 5th of January, that at a future time I would complete the history of the case at the Hôtel Dieu, in which ligation of the femoral artery was practised by M. Roux, for a tumor situated at the head of the tibia, soon after which hemorrhage supervened

and the man died. The post mortem revelations, which exhibit an error in the diagnosis of the distinguished surgeon, and the correctness of the *Gazette des Hôpitaux* in its criticisms on the case, are as follows;—previous to giving which, however, I will briefly describe the condition of the patient up to the time of his death:

The operation was performed on the 19th of November, four days after which the first dressings were removed, when the condition of the patient was most satisfactory, the numbness which was so disagreeable at first being almost gone, and the temperature of the member nearly that of the healthy limb. Sixteen days after the ligature was applied a very considerable hemorrhage occurred, which was partially arrested by one of the hospital pupils until M. Roux arrived, who, considering the extreme feebleness of the patient from the loss of blood, and his unwillingness to submit to another operation, as well as for other reasons, contented himself with simply ligaturing the free extremity of the artery a few lines above the point of section, instead of, as might have been done under other circumstances, enlarging the opening in order to apply a ligature beyond the point where the arterial tissues were inflamed. Unhappily, while ligaturing the artery, a large venous trunk was wounded, which circumstance, in conjunction, perhaps, with the evil condition to which the patient had been brought by the loss of blood, developed a phlebitis, a purulent diathesis, and the patient died on the morning of the 11th of December.

At the autopsy, abscesses were found in the spleen and liver, pus existed in the right femoro-tibial articulation, and the tibia itself was so profoundly altered that a quick jerk was sufficient to fracture it. The arterial extremity was still well clasped by the last ligature, and no traces of a second hemorrhage were observable. A section of the tibia perpendicular to its length, made on a level with the superior layers of the bone, showed a healthy osseous tissue; but a longitudinal section revealed a degeneration evidently encephaloid, presenting here and there gelatinous-like points, having destroyed the

compact lamellæ of the bone, and constituting the two tumors, or rather the bi-lobed tumor of which I spoke, and in which were felt, before the operation, beats synchronous with the pulsations of the heart. The cartilages at the articulation of the knee had not undergone any alterations of a grave or important character.

This case, evidently beyond the resources of art, affords me an opportunity of giving the four forms of *cancer of the bones* distinguished by M. Nélaton, in doing which, you will not consider me as attempting didactic pathology, but as simply endeavoring, by translating the remarks of one of the latest and most distinguished writers on this subject, to throw light upon a point so difficult and obscure, that a surgeon whose merits no one will question was himself guilty of an error in diagnosis.

1st. In the first form, within the interior itself of the osseous tissue, nuclei of cancerous matter or tissue are found, in cavities which they exactly fill; the tissue of the bone has completely disappeared at the points invaded by the accidental growth, and there is a loss of osseous substance both in its spongy and compact portion, while in the neighborhood of this loss the bone appears to have undergone no alteration, and scarcely more vascularity is remarked than is observed in the normal state of the bone. In proportion as the disease progresses, the cancerous mass becomes developed, and forms a prominence more or less considerable on the surface of the bone, which, I may note, was the case in the patient at the Hôtel Dieu. If the production occupies a long bone and corresponds to its diaphysis, it is not uncommon to see the cancerous growth extend towards the medullary canal, whose membrane offers no resistance, and thus form a tumor which mounts into the interior much higher than its seat or volume would lead one to suppose—a disposition which it is important to bear in mind in cases where it is desirable to resort to amputation of the limb.

2d. In the second form, which is allied more especially to the *osteo-sarcoma* of authors, the tissue of the bone has suffered a profound modification, and generally presents a voluminous

tumor, a section of which exposes a great number of cellules, very irregular both in form and dimensions, filled with cancerous matter in different stages of softening, while there seems also to be a tenuity of the osseous tissue in the cellules of which the cancerous matter is deposited.

3d. The third form is that in which a cancerous mass commences in the interior of a bone, develops itself by little and little, and pressing eccentrically the osseous matter, which yields in a slow and gradual manner, becoming thinner and thinner until at length it presents only a very friable shell, in which is contained the cancerous matter; this is the *spina ventosa* of writers. In this variety, when the tumor is sufficiently voluminous, the shell becomes perforated, the cancerous matter escapes by the aperture, forms a prominence under the skin, and goes on like other cancers.

4th. The tumor is attached to the exterior of the bone, covered by periosteum, and has been called *fungous tumor of the periosteum*; though it is easy to see that the osseous tissue is itself altered; in fact, a collection of osseous prolongations extremely fine and flexible are found, which may be compared to hair implanted on the surface of the bone. These points or prolongations are united in the form of a wick or cord, in the intervals and on the surface of which the cancerous matter is deposited.

One sees, adds M. Nélaton, that widely marked differences exist between these forms of cancer of the bones, while at the same time they exhibit the characters proper to cancerous affections. Thus, whatever may be its original form, the tumor constantly increases, softens, ulcerates, almost always reproduces itself after removal, and eventually produces the cancerous cachexia.

An important remark to be made relative to these tumors is, that they never attack the cartilaginous tissue, and that when the cancer has commenced near the articular extremity of a bone, the diarthrodial cartilage is always found untouched, notwithstanding the complete degeneration of the epiphysis which supported it. Whenever the cancerous growth extends

into the articulation, it is by a point where the bone is covered only by periosteum and the synovial membrane.

I have very much abridged the anatomical history of this disease of the bones, and will close with a few remarks on the progress and symptomatology of these tumors. They may show themselves without having been preceded or accompanied by pain; all that occurs, probably, being that at the moment of their development the patient may experience acute but transient pains, perhaps spontaneous, sometimes following fatigue or a sudden movement. Nothing is determined as regards their progress, which at times is slow, and again remarkably rapid. Finally, and this should render one reserved in the exact diagnosis, it must not be forgotten that certain cancers of the bones present beats synchronous with the arterial pulsations—beats which do not consist in a simple rising, but in a true expansive movement, such as is met with in aneurismal tumors. The ear often detects a *bruit de souffle*, less distinct, however, than that of aneurismal tumors; this *bruit de souffle* is not constant, and in the case just related in the service of M. Roux it did not exist. As a differential diagnosis, one will note, when he has been able to observe these tumors from their commencement, that pulsations are felt in aneurisms from the beginning, whereas in cancers they are perceived only at a period when the accidental tissue has become very vascular—that is to say, at an advanced period of their formation.

At the Hospital St. Louis, in July last, there was a case of inguinal hernia reduced spontaneously by the application of a cataplasm. As the case is a singular one, I have thought it sufficiently interesting to translate from the report contained in one of the recent numbers of the *Gazette des Hôpitaux*:

On the 2d of July, 1846, a man aged 51 years, a shoemaker, of good and robust constitution, entered the wards of M. Malgaigne, having a hernia of the left side, of three years' standing, which had increased gradually and insensibly in volume from the size of a billiard ball to that of a man's fist; it was



seated in the groin at first, but finally extended into the scrotum. The hernia returned easily, but escaped upon the least exertion; a bandage was applied, but the patient neglected to wear it constantly, and in the end left it off altogether. Neither of the parents of the patient has had a hernia; one of his brothers has; the patient himself has labored under a cough for four years, to which cause he ascribes the development of the hernia. Tuesday, 30th June, while coughing, the hernia escaped; this time the attempts of the patient to return it were unavailing; he had severe attacks of colic during the nights of Tuesday and Wednesday, and vomited at three different times, at first food, afterwards a greenish colored liquid. Wednesday morning the patient succeeded in effecting a reduction of the tumor; several times during the day his bowels were moved; the condition of things continued so pleasant that he resumed his work without applying the bandage, which was old, worn out and useless. Thursday at 2 o'clock, while going down stairs, the hernia again made its appearance, accompanied by severe pains in the belly, similar to those felt on Tuesday, but without vomiting. All attempts at reduction were ineffectual; the patient had been to stool in the morning; he had breakfasted at 10 o'clock, but was unable to take any more food during the day; at 5, p. m. he entered the hospital, when an inguinal hernia of the left side, which appeared to be strangulated, was observed. Ordered a warm bath, during which taxis was practised by the interne without success, after which a purgative injection was prescribed.

M. Malgaigne being sent for arrived at 10 o'clock in the evening, and detected the following state of things: A pyriform tumor, of the size of the fist, occupying the left side and descending into the scrotum, whose largest extremity was below the smaller or contracted portion looking towards the inguinal ring; the skin which covered it was warm, smooth, shining, much distended, and slightly red in the part occupied by the sack; the tumor was painful on pressure, hard, resisting, and very heavy; perfectly dull; projected forwards so as to displace the penis towards the right side; surface uniform;

its pedicle or constricted part seemed like a very hard cord of the size of three fingers, occupying the inguinal canal. The hernia was very distinct from the testicle, which occupied the lower part of the scrotum; it was separated from this organ by a furrow or contraction situated at the distance of two fingers' breadth from the base of the tumor. The abdomen was but slightly painful on pressure, except towards the left half, in the iliac fossa and the flank of the same side. No vomiting or disposition to vomit; patient calm; pulse regular, 76; taxis painful and ineffectual; and the injection, although half an hour had elapsed since its administration, had produced no effect. A large cushion was applied under the hams of the patient, which maintained the thighs flexed upon the pelvis; the tumor was covered by a cataplasm, which was soon followed by marked relief; the patient falling asleep and remaining so until 5 o'clock in the morning, when, awaking, he put his hand upon his groin, and was greatly astonished to find the hernia gone; it had returned entirely through the influence of the cataplasm, which proves the existence of an inflamed hernia.

The reduction was in fact complete; in the forenoon the patient had an abundant stool; and the next day he left the hospital, provided with a bandage. This fact exemplifies in a very striking manner the happy results sometimes obtained, in the most embarrassing cases, by the administration of the simplest remedies, after more active and rational methods have completely failed.

Some weeks ago, in the wards of M. Louis, at the Hôtel Dieu, there was a girl 18 years old, who about a month and a half previously had been delivered of an infant at full term: nothing peculiar was observed during or after the accouchement; the milk fever had been regular in force and duration; on the sixth day after her entrance into the hospital, intense febrile phenomena supervened, accompanied by pains in the hypogastric region, which yielded to the application of some leeches. The fever showed itself again in two days, associ-

ated with pains in the abdomen so severe as to draw cries from the patient. These had commenced at midnight the night before; they were greatly increased by pressure, and accompanied by liquid stools, vomiting and extreme pallor of the face; notwithstanding which, M. Louis contented himself with prescribing sinapisms to the lower extremities, and two laudanum injections of fifteen drops each. In half an hour after the visit, in addition to the colics, she suffered with pains commencing at the stomach and extending even to the throat, producing partial suffocation; considerable dyspnœa was experienced, attended by extreme anxiety, and cadaverous hue of the face; the eyes were haggard; movements at times disordered. It was evident that nervous symptoms were present, but arising from a cause which it was at the moment impossible to point out.

M. Louis found the condition of the patient the same the day following, and merely added to the former prescription an antispasmodic. At six o'clock in the evening, a total change had occurred: all the alarming phenomena had disappeared; very little colic remained; respiration sufficiently free; pressure on the belly unaccompanied by pain; no tympanitis; no increase in the volume of the uterus; little fever; and the day after, the patient had appetite for food, desired to get up, and, save the excessive pallor of the face which still continued, her condition was quite satisfactory. The next day and the day after passed without a renewal of the attacks; respiration still unembarrassed; the only phenomena remaining being considerable debility and extreme paleness.

What has been the nature of this apparently formidable but transient affection? The symptoms present indicated an extremely acute peritonitis arising from an intestinal perforation, but there are many reasons which will cause this opinion to be repudiated: In the first place, extreme difficulty of respiration was observed, which is not usually found in these inflammations of the peritoneum; and, what is of still more importance, the termination of the affection, the rapid disappearance of the phenomena, establish conclusively that there was no peritoni-

tis. For the same reasons, there could have been no metritis in the case; added to which it may be remarked that inflammation of the uterus never comes on so suddenly and with so alarming an assemblage of symptoms. Was it an attack of hysteria of a peculiar nature? It is still difficult to admit this. In cases of this description, it is imprudent to give an immediate opinion, as M. Louis showed by reserving his until the following day, when, seeing that the suffocation and pains in the abdomen had entirely ceased, he concluded that all the symptoms were purely nervous, and had been produced by the presence of a clot formed suddenly, from some unknown cause, in one of the ventricles of the heart, which had given rise to considerable embarrassment in the circulation, and afterwards in the general innervation of the economy; the clot having soon become dissolved or absorbed, the crisis had completely passed over, not to be reproduced.

About the same time, phenomena similar to those just detailed were observed in the wards of M. Rostan, in the case of a young woman who was not in the puerperal condition like the former, but who, while enjoying the most perfect health, felt herself so violently oppressed, that, to use her own words, "she thought she could not live an hour." At the same time that she was a prey to this sense of suffocation, the most distressing pains in the abdomen and chest were experienced, those in the precordial region being most severe. The first attacks came on three weeks ago, since which time the same symptoms have repeatedly shown themselves, and during the intervals—that is, during the moments of calm—the pulse is so small and threadlike that it can hardly be felt at the wrists. The abdominal and precordial pains persist, though less severe; auscultation of the chest reveals a normal vesicular respiration, while the pulsations of the heart are dull, deep, difficult to distinguish clearly, joined to a *bruit de souffle* which predominates over the respiratory sound; marked dullness from the third to the seventh rib upon percussion, except which, all the functions are properly executed; there being no marked thirst, cephalalgia, heat of the skin, or sweatings: appetite and diges-

tion good; stools healthy; the menstrual flow has not appeared for three months.

Concerning this patient M. Rostan made the following observations: It is clear that this was an acute malady, seated, where? All the indications show that it was in the heart or its envelops; but was it a pericarditis, or an inflammation of the heart itself? The professor is inclined to the latter opinion; but it is nevertheless proper to remark, that carditis alone does not explain all the phenomena observed; there must have been something else, which is found in inflammation of the internal membrane, designated by Broussais *internal carditis*, and by late writers *endocarditis*, which induced the formation of sanguine clots and their retention in the cavities of the heart. The enormous extent of the dullness in the precordial region would lead to the belief that there was also, perhaps, pericarditis with serous effusion. Following this diagnosis, the treatment should be antiphlogistic, which in fact was the case; the patient has been twice bled, and cups have been applied over the region of the heart; and under this plan a prompt and sensible amelioration has resulted.

In cases of this description, the advantages of sanguine depletion are numerous. When the pulse is of that reduced size already alluded to, bleeding develops it by dissipating the inflammation; while another effect is the diminution of the plasticity of the blood, in consequence of which the tendency to the formation of clots is greatly lessened, and if already formed, it diminishes their chances to augment in volume.

It is to be remarked that although these two cases are not without certain analogies, still there is a very great difference between them. In that of Louis, the brief duration of the symptoms forbids the supposition, that the clot could have formed in the heart in consequence of an inflammation of the substance of the organ. What then could have been the determining cause of this coagulation of the blood? Evidently it is beyond our power to say in a positive manner, though, since it is reduced to hypothesis, there is nothing to hinder the search for the cause of the phenomena in the nervous system.



If nervous congestions are admitted to be possible, and to be capable of being the cause of real disorders, who will oppose, in a case of this kind, our ascribing to a disturbance of the general innervation a disorder, of which the occasional cause escapes our notice, viz., the formation of a clot in one of the ventricles of the heart?

I pass to the third case, the subject of which was a woman aged 18 years, a milliner, who had been constipated for some days, without either much pain in the abdomen, sensibility on pressure, rumbling of the intestines—in a word, without anything which indicated a typhoid state. The respiratory murmur was normal throughout the lung, save at the right side, where, in a limited point, a light *bruit de souffle*, perhaps physiological, was detected; the sensibility of the abdomen was obtuse, which is explained by the obstinate constipation, dating now eight days, at which time her menstrual discharge being present, was suddenly checked after exposure to cold, which is the only cause the patient is able to assign for her affection; intense cephalalgia is the only phenomenon on the part of the nervous system; dullness of the heart in its normal limits; pulsations strong; the first sound accompanied by a distinct *souffle*; pulse from 104 to 108. Venesection to four hundred grammes.

The next day M. Rostan saw the patient, and adopting the ideas of his *chef de clinique*, (who had ordered the first bleeding,) relative to a probable inflammation of the heart, prescribed another venesection, which furnished a clot with a firm, thick, buffy coat; cups were applied in the evening; the *bruit de souffle* had diminished perceptibly under the influence of the general and local depletion, each of which had been practised three times in four days, and at the end of five days no traces of the *bruit de souffle* remained. Rostan thinks there was in this case clearly an inflammation of the internal membrane of the heart, perhaps of the tissue itself of the organ, supervening without any appreciable cause, and neither accompanied, as in the preceding cases, by the formation of

clots, nor by that reduction of the pulse so remarkable in the second, and so characteristic of it.

A case of inflammation of the subcutaneous cellular tissue of the right leg occurred in the wards of M. Gerdy, at La Charité Hospital, a few days ago, which was successfully treated by simply elevating the member, a brief outline of which I believe will be found interesting. The patient was a young man of a good constitution, who presented, at the time of his admission into the hospital, a commencing phlegmon which as yet offered no appreciable fluctuation; the skin was red and hot; the tumor was quite prominent, and, without doubt, was produced by an inflammation of the subcutaneous cellular tissue; already it involved a large portion of the right leg. M. Gerdy placed the affected limb in such a position that the foot was considerably elevated above the plane of the pelvis, and under this treatment alone in a short time the inflammatory action diminished in intensity, the redness and heat became less, resolution was effected rapidly, and a complete recovery resulted.

Dr. Rayer, of whom I spoke in a previous letter, has been in the habit of using, with most satisfactory results, the oil of croton tiglium in frictions on the anterior surface of the thoracic cavity, in those persons who were laboring under pulmonary tuberculization. According to this able practitioner, twenty-four drops of the oil may be used for each friction with impunity. It is used by pouring a little at a time on the chest, and then rubbing it with the naked palm of the hand; this is followed, as is well known, by the development of pimples or buttons on the breast, which the hand escapes, owing, perhaps, to the absence of follicles and the greater thickness of the epidermis on its palmar portion. The employment of the croton oil in this way and in this quantity affords notable relief to the dyspnœa, the nocturnal agitation, and the fever which so cruelly torment patients of this kind; and it is to be regretted that the high price of the article places it be-

yond the reach of the indigent, and must seriously limit its application in such affections.

Here I may mention that a medical friend from New York, now in Paris, has assured me that, during the last four or five years, he has applied the croton oil in frictions to the anterior and superior surface of his chest whenever he has been troubled with a cold which affected especially the bronchia, and that it has always afforded relief within twenty-four hours. He thinks the pustules form more readily if the part has previously been washed well with warm water, and afterwards rubbed with a rag saturated with spirits of camphor. Previously to commencing frictions with the oil, which he usually does in the evening before going to bed, he takes care to place a handkerchief between the thorax and his under-shirt, in order to prevent the latter from becoming soiled when the pustules break.

Dr. Rognetta says that he cannot too highly recommend in smallpox the application of mercurial ointment, solidified by the aid of starch or flour, which he renews once or twice during the day. A thick layer of the pommade is spread with the finger on the forehead, cheeks, lips, eyes, nose, ears, etc. The buttons are aborted in these regions, the eyes are perfectly preserved; the face, nose and lips do not experience that horrible and acutely painful swelling which belongs to confluent variola, and the patients feel themselves refreshed by each application of the mercurial ointment; in a word, it is positive that this agent is really a precious remedy, not only as a preservative against cicatrices, but, what is still more useful, as a true safeguard to the eyes, and a preventive of the distressing pains of which the patients complain so much. These results have been proved by M. Rognetta in the wards of M. Briquet at La Charité; besides which he advises blood-letting in adults in smallpox, adding that he has seen venesection practised in the hospitals in Italy, especially at the commencement of the affection, not only once, but four, five, and even six times, with the happiest effects. If the termination

of the disease is fatal, it is because of the disease itself, and not the bleeding. He treats the fear of purulent absorption as a mere vagary, and considers that abstraction of blood cannot but facilitate the march of the eruption. Of course among children the use of the lancet is inadmissible.

M. Pelouze, at a late meeting of the Academy of Sciences, made some remarks concerning a letter of Prof. Liebig relative to certain new researches in animal chemistry. M. Liebig, after washing large quantities of hashed meat and collecting the water used in the operation, has detected in the muscular flesh the constant presence of an acid which was first discovered in milk, and hence called lactic acid; this acid thus spread through the flesh is separated from the blood only by fine and permeable membranes. Prof. Liebig finds in the approximation of this acid and the alkaline principle of the blood the previous cause of the electrical currents discovered in the muscles by M. Matteucci. While performing these delicate manipulations, Liebig has met with a substance, the knowledge of which is due to M. Chevreul, and which he designates by the name of *creantine*. It is found in very small quantities, but its existence is constant. It has been detected in the flesh of the ox, calf, sheep, hog, horse, hare, fowl, and pike fish. Is it to the creantine that the soup of meat owes the nutritive qualities which are possessed by soups obtained from no other parts of the animal organization but the muscles. Liebig considers that it is the creantine which plays the most important part in the living economy.

M. Pellerin has just communicated some new and striking views respecting sea-sickness. He maintains that the opinions that attribute this affection to a congestion of the brain, and to a disturbance in the abdominal viscera produced by the motion of the vessel, are alike groundless. According to M. Pellerin, the heaving and rolling of a vessel produce a derangement in the circulation, which causes sea-sickness; the result of this derangement is not, as is stated by Wollaston, a congestion

of the brain, but, on the contrary, this organ is deprived of that amount of blood necessary for its stimulation. The sensations of sea-sickness are much like those experienced when a patient has been bled to the point of syncope. In support of his view of the pathology of this affection, M. Pellerin mentions, what every one who has been sea-sick knows, that its violence is greatly lessened by assuming the horizontal position, a circumstance which, I need hardly say, is witnessed also in cases of syncope. In pregnant women, the uterus requiring a larger amount of blood than under other circumstances, the brain is deprived of a portion of that which it ordinarily receives, and thus nausea is produced, between which and the sensations of sea-sickness Mons. P. draws an analogy, strongly supported by the fact, that the nausea of pregnancy is rare while the female is lying in bed, but is frequently felt when she gets up. Adopting this as the correct opinion in relation to sea-sickness, the remedies should be everything calculated to determine blood to the head, such as belts around the body, etc. He further suggests that persons who are troubled with a tendency to a flow of blood to the head should try sea-sickness as a remedy; and certainly, if he is right in his theory, his suggestion is not unsupported by reason.

Knowing that the journals, medical and political, abound in accounts of the use of vapor of ether, I content myself with simply saying, that the evidences in its favor are so irresistible, that no observer can withstand the conviction of the powers attributed to it by American and English surgeons; and that where there was at first the most unscientific opposition to its use, there is now the utmost eagerness to promulgate its, I may say, blessed properties. From a Paris English paper I clip the following extract, containing the statement of M. Gerdy, made before the Academy of Sciences at its last meeting, relative to the effects of the inhalation upon himself:

After stating that he inhaled the ether through the tube of a bottle containing about three pints, he says: "The irritation which I felt at first in the throat made me cough; but being



resolved to resist, I soon triumphed over this little obstacle. The irritation and cough gave way as the inhalation continued. I next experienced a numbness of the head, attended with heat, as if the vapor of alcoholic and intoxicating liquor was mounting to the brain. This numbness extended rapidly first to the feet, and then to the legs and arms, and next to the loins, and increased rapidly with each inspiration. In the organs of sensation it was attended with an agreeable feeling of heat, and of a vibration similar to that which we experience in touching a vibrating body, such, for instance, as a large bell when struck by its hammer. When these two sensations reached their maximum, I experienced an impression both agreeable and voluptuous, like that of intoxication. It is the numbness of which I speak that diminishes the pain in operations. My sight was not sensibly benumbed; the hearing was more so, and it became more and more feeble as the intoxication increased. I convinced myself, however, that the smell, the taste, and the touch, properly speaking, were not paralyzed by the general numbness which came over me; but my eyelids became heavy, and I felt a desire to give myself up to the charms of my intoxication."

Liston and Ferguson, of London, have employed the vapor preparatory to their operations with most decided success, several of their patients having been wholly unconscious of pain.

*A correction.*—In my last letter (pages 229, '30, March number of this Journal.) I was betrayed into an error by an incorrect report of Béhrer's lecture on *smallpox*. I find the error corrected in another report of the lecture. For "variola," "varioid" should be substituted, and the sentence will then read, You very rarely find umbilical pustules in varioid.

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.* By  
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Last week, M. Blandin, in one of his lectures in his amphitheatre at the Hôtel Dieu, spoke of the following case that had occurred in his female ward, which is so remarkable in many respects that I have concluded to give you a brief report of the lecture, to which I listened, as I do to all of his most practical and valuable lectures, with the greatest pleasure.

The subject, a woman sixty years of age, has for two years past had a crural hernia of the left side, which occasionally protruded, and as often returned, until five days ago, since which time there have been unequivocal signs of strangulation; eructations, vomitings, which presented this morning a fecal character; neither gaseous nor solid matter has been

passed by the anus. The tumor is painful, and of a very intensely reddish violet hue.

Although the diagnosis, so far as regards a strangulated hernia, is very clear, it is by no means so easy to determine its exact composition. That the intestine is comprised, the intensity of the symptoms, the complete suppression of the stools, and the nature of the matter thrown up, leave no doubt. But whether there is not something else besides the intestine is a question which, in the present condition of things, could not be answered, the tumor being too much inflamed to admit of our establishing the absence or presence of the omentum. Happily, however, the clearing up of this point has no weight in the decision we must come to, and the knowledge of the actual condition of the hernia, while it is a thing of infinitely more importance, is more easily arrived at.

The surgeon began this inquiry by assuming that gangrene existed, a diagnosis which was founded, in the first place, upon the probable degree of constriction exercised by the ring. Under the influence of a hernia of two years' standing, the inguinal canal, composed of elements which yield much more readily, would have dilated; while the canal ring, on the contrary, composed of different materials admits of very slight extension; its posterior boundary, formed by the horizontal branch of the pelvis, offers the resistance of bone; its anterior side, represented by the most solid portion of the Fallopian ligament, and its internal side by Gimbernat's ligament, it is distended only with extreme difficulty; its external side, formed by the deep layer of the *fascia lata* is more extensible, though this is very decidedly rigid.

Secondly, the hernia had been in a state of strangulation for five days, a length of time more than sufficient for the development of gangrene in similar cases.

Finally, the tumor presented an intensely reddish violet color, and pressure made with the finger obtained crepitation, which in such cases is a manifest sign of gangrene. We could not suppose that the mortification was confined to the external coverings of the sac, for it always proceeds in this

case from the hernia to its envelops, that is eccentrically. The intestine itself is evidently in a state of suppuration, and is either already broken or on the eve of breaking.

In a case of this kind what is the duty of the surgeon? Abandoned to itself a cure of the hernia may possibly be effected by the efforts of nature alone—adhesions being established at the ring, and an artificial anus being formed. A well known example of this spontaneous recovery occurred to J. L. Petit, who one day on entering a tavern recognised the odor of gangrene, and, learning from whence it proceeded, examined the patient, found a hernia in a state of gangrene, announced a happy termination, made some prescriptions to encourage the patient, and on his return the subject was out of danger. But such an issue is far too rare to be counted upon, and M. Blandin proceeded to perform the operation by forming a transversal fold with the integuments upon the middle of the tumor, and an incision parallel to the tumor and perpendicular to the fold, is made to the base of this latter. The subcutaneous cellular tissue is infiltrated with a blackish liquid exhaling the odor of gangrene; an abundant serum rendered it easy to recognise and penetrate the sac. The engorgement of the ligament embarrassing the examination of the hernia, a second incision was made perpendicular to the first. The small intestine was now carefully examined; it was of a deep brown color, its walls hypertrophied, and a single one of its convolutions constituted the hernia. The evidences of gangrene appearing incontestable, M. B. decided not to practice *unbridling*, but to open the intestine in order to establish an artificial anus. He now introduced a female sound into the extremity whose greater dilatation indicated it as the superior, but no matter, either gaseous, solid or liquid escaped by the instrument, which he allowed to remain, in the hope that the evacuation would be voluntarily established before the visit on the next morning; this, however, was not the case, the patient being found in almost the same condition in which she had been left the day before, the sound having given egress to no fecal matter.

What was to be done? Suspecting that perhaps the female sound had not been introduced sufficiently in front, and that its eyes had probably been stopped up by the strangulated part, a gum-elastic sound was substituted, and pushed deeply in. Thinking, on the other hand, that the female sound might have missed its end, and entered the inferior instead of the superior extremity of the intestine, a second gum-elastic sound was introduced into the other, that which might be the inferior or perhaps the superior extremity. Still nothing escaped, either through these tubes or along their sides, which was equally the case the following day.

At the visit on the second day after the operation the patient seemed to be no worse; she even asked for food, and there were no appreciable signs of peritonitis. But the vomiting had continued and the tympanitis had augmented to such a degree, that the convolutions of the intestines were delineated almost plainly enough to be counted through the parietes.

On the supposition that the spasmodic contraction of the inferior end of the intestine had applied it on the sound and closed its eyes, or that some unforeseen obstacle, which it would be impossible to remove without a new operation, was opposed to the re-establishment of the course of the fecal matter, the following operation was determined upon. It was to consist of an incision which should admit of the two extremities of the intestine being drawn out, in order the better to submit them to examination by the sight and touch, and thus attain a more exact apprehension of the state in which they were. For the sake of preserving useful adhesions and preventing contraction of the intestine into the abdomen, which would have been consequent upon its escape from the artificial ligatures which held it in place, the incision made was from without inwards, as M. B. has already done more than once with success. The external coverings of Gimbernat's ligament were necessarily divided; the ligament itself was divided with the care necessary in proceeding from the superficial to the deep seated parts. The two ends of



the intestine after detaching some slight adhesions, were drawn out to the length of about two centimetres. To our great astonishment, remarks M. Blandin, there was no expulsion of fecal matters. "A sound is placed in the superior extremity, nothing; another in the inferior, nothing still. In despair we left the two sounds until the next morning, after having prescribed a purgative injection; but the result was the same; nothing was discharged, and the patient died in the evening of the third day from the operation, and the eighth since the strangulation."

M. Blandin was utterly at a loss for a plausible explanation of this suspension of the course of the fecal matter, so prolonged, so obstinate, notwithstanding the opening of the intestine, notwithstanding the relief of the strangulation, the situation of the two extremities at the exterior, and the permanent presence in their cavities of a sound. A fecal clot clogging the small intestine, an internal strangulation, a volvulus, all seemed improbable.

The opening of the body, far from putting an end to our astonishment, M. Blandin continues, rather increased it.— "What obstacle did we find? None! The intestine was throughout perfectly healthy, and had preserved its proper calibre, and either of these operations that we performed would, in ordinary cases, have saved the life of the patient. If we could have obtained evacuations we should without doubt have prevented the development of the peritonitis which was the cause of the patient's death." This supposition seems so much the more likely as the inflammation of the serous membrane was slight, only characterised by some ounces of turbid liquid in the inferior pelvis, and some faintly developed false membrane around the ring.

M. Blandin was unwilling to admit, although he confessed he could not otherwise understand the phenomenon, either that the intestine had spasmodically contracted on and closed the eyes of the sound, or that clots of fecal matter had obstructed them. He closed by professing his intention here—

after to employ in such cases a more voluminous sound, pierced with a single eye at its extremity in the direction of its axis, as he believes that through an instrument of this kind the fecal matter would pass more easily.

The following very simple and easy method of detecting the presence of sugar in the urine of diabetic patients is practised in the Paris hospitals: Pour a small quantity of the urine into a glass tube, to which you add a few drops of the aqueous solution of the sulphate of copper, the tube being held in the flame of an alcohol lamp until the liquid boils. If the urine is healthy it produces no action on the salts of copper, and the liquid preserves the beautiful blue color which has been imparted to it by the copper; but if the urine contain sugar, this effects the decomposition of the salt, and as soon as ebullition takes place the mixture is observed to pass first to a green, afterwards to a fawn color, which is more deeply marked as the proportion of the sugar is greater. Liquid caustic potash may be substituted for the sulphate of copper, in which case the color of the mixture varies according to the amount of sugar present, from a yellow to a more or less deep brown.

In the minds of many practitioners the efficacy of iodine injections in the radical cure of hydrocele is still a question, and must remain so until still further testimony is added to that already on hand, which is not a little. A case occurred not long since at *Du Midi* hospital, in the service of Vidal, which I think may be regarded as almost unequivocally favorable to the value of iodine, and such, as will presently appear, was also the opinion of Vidal himself.

The patient was 43 years old, a house painter, who, about a year previous to his admission into the hospital, noticed for the first time an abnormal volume of his right testis. The organ gradually increased to the size of a man's fist, fluctuated, was regular, and offered the characteristic transparency of hydrocele. Some eight months after the appearance of

the affection the patient presented himself to Vidal, who punctured the tumor and injected into the tunica vaginalis a little common wine in which had been boiled some Provins' roses. In ten days the serum re-accumulated in the vaginal tunic, formed a tumor almost as voluminous, and possessing the same characters as the first, especially the very marked transparency. Vidal again punctured it—and, with the view of more successfully irritating the tunica vaginalis, added this time a third of alcohol to the wine which he used for the injection. But in this attempt he was as unsuccessful as he had been in the former, for the hydrocele was re-formed and acquired in eight days the same volume, and in eleven days the same transparency.

The patient returned to the hospital on the 10th of December in order again to submit to the puncture and injection of the tumor, which latter was this time performed with the tincture of iodine (equal parts of water and tincture of iodine.) I should not omit to mention that this and the previous injections were made twice, and allowed to remain ten minutes, or thereabouts, in the vaginal tunic. The tumor was reproduced in a few days, diminished, somewhat, however, in volume, and remained stationary during the greater part of a month. A third relapse might have been anticipated, but the tumor presented none of the characters of the former; it was hard, unequal, sufficiently heavy to embarrass the patient, and not at all transparent. Vidal declared that a cure had been effected, but a slow one which he must aid, so on the 14th of January a vesicatory was placed on the right side of the scrotum. On the 18th, although the tumor presented some of the characters remarked previously to the application of the blister, it had sensibly diminished, and become somewhat painful. The blister was allowed to dry. The tumor had diminished considerably on the 21st, when Vidal ordered it to be covered with a coat of mercurial ointment in order to hasten resolution. The 28th, the volume of the two organs is the same, and the right, which hitherto has been painful, is now so no longer. On the 30th the tes-

tes have returned completely to their healthy state. This, although a tardy, is nevertheless a perfect cure, and it may, in my opinion, be fairly attributed to the influence of the iodine. I may remark that it agrees, in many respects, with the cases of slow recovery cited by Velpeau when on the subject of iodine injections in the surgical treatment of hydrocele.

The following curious case occurred not a great while since in the wards of M. Roux, at the Hôtel Dieu. The patient was a very robust man, 45 years of age, who has suffered for a month past from pains in the head, weakness in the legs, and general languor. Some days since his physician ordered him to apply twenty leeches to his anus, which was done, and immediately after their removal the perineum and scrotum became painful, red, and apparently erysipelatous. The pain and redness soon gained the abdominal parietes, and on the fifth day the abdomen was tense, red in its two inferior thirds, and seemed occupied by a vast phlegmonous abscess, and the scrotum itself appeared to be the seat of the same affection. Besides this there appeared to be a blenorrhœa of five or six years' standing; though he has never had any difficulty in urinating, and the jet has always been sufficiently large; only for the last two or three days he has had frequent desire to micturate, which, when done, is followed by very violent burning sensations in the urethra. A large catheter was introduced into the bladder with facility and gave issue to a large quantity of urine, notwithstanding the patient had urinated not an hour before. From what does this phlegmonous condition of the abdomen, accompanied by the most distressing pains, proceed? Is it an erysipelas occasioned by the bites of poisonous leeches? After an attentive and very minute examination, a severe palpitation of the diseased parts of the scrotum and perineum induced M. Roux to believe that there was urinous infiltration; and without delay large oblique incisions, from without inwards and from above

downwards, were made upon the two sides of the abdomen; another, parallel to the median line of about twelve or fifteen millimetres in depth, and five or six centimetres in length; finally, a fourth was made from the top to the base of the scrotum. These incisions were really frightful, as well from their extent, as their depth, and situation. It seemed for sometime as though the testicle might escape and the intestines protrude through these different openings. But none of the serous cavities had been penetrated; neither the tunica vaginalis nor peritoneum had been injured, and the wounds gave exit only to a very large quantity of blood, mixed with a fetid ammoniacal urine.

The diagnosis of this rather remarkable case was rendered doubly difficult, by the absence of every known and appreciable cause with which we are able to connect this urinous infiltration. There would have been infinitely less embarrassment if the patient had been affected with stricture of the urethra, paralysis of the bladder, etc. Although the patient declares that he never attempted catheterism, there is no certainty that such efforts have not been made, perhaps by himself, and which have resulted in the formation of a false passage, which was the habitual cause of the retention of the urine.

In July, 1845, in a paper communicated to the Academy of Sciences M. Jobert (de Lambaille) has described a new method of operation which he had substituted for the one called *élytrophlastic*, and which he designates *autoplastic par glassement*; at the same time he reported a case of vesico-vaginal fistula, occupying the whole extent of the urethra and of the vesico-vaginal septum, to about half a centimetre from the neck of the uterus, which he had completely cured by this operation, and which I proceed to describe, illustrated by the history of one or two cases.



*Vesico-vaginal fistula seated at the left side of the vagina directed from before backwards, at least six centimetres in length, complicated with loss of substance, separation of the borders of the fistula, and hernia of the bladder.—Approximation of the lips of the wound by interrupted sutures.—Lateral incision comprehending the whole thickness of the walls of the vagina, directed from behind forwards, and practised on the side opposite the fistula.*

CASE I.—A woman, aged 22 years, entered the Saint Louis hospital on the 26th of June, 1846, to be treated for vesico-vaginal fistula supervening upon a tedious and difficult accouchment. Of a strong constitution, this young woman had never had any serious disease. She was married in her twentieth year, and gave birth to a child the year following, (September, 1845). The labor lasted eight days, and, proceeding with great slowness, the accoucheur was not called until the fourth day after the first pains had appeared. Every endeavor that he made to accelerate it was ineffectual, and on the eighth day he decided to terminate the labor by performing the operation of cephalotripsy. For three days the patient had not urinated.

After the delivery, intense pains were felt in the vesical and hypogastric regions. During the first eight days no difficulty was experienced in the passage of the urine. At the end of this time while the patient was turning herself in bed she felt a foreign body, of a dark color, about the size and dimensions of an almond, suddenly escape by the vulva, and at the same instant her bed was inundated with a gush of liquid, which from that moment has not ceased to flow. After the fall of the eschar, and the formation of the vesico-vaginal fistula, the strength, vital force, and *embonpoint*, even, soon returned, and in the space of a few weeks the woman was in full convalescence.

Notwithstanding the continual flow of urine it did not prevent her from resuming her occupation, and having in vain endeavored to mitigate her infirmity, she came to Paris and entered the Cochin hospital in the service of M. Michon; here she remained for three months, during which time, although she underwent many cauterizations with the red iron and nitrate of silver, no amelioration was obtained in the

state of the fistula, and the patient, demanding to be dismissed, came to the hospital Saint Louis, when the following symptoms were observed: There no longer existed any disposition to urinate; the urine which had ceased to pass by the urethra, fell, involuntarily, drop by drop, into the interior to pass afterwards to the exterior in a continuous manner, whatever the position assumed by the patient. The index finger, introduced into the vagina a certain depth encountered, on the anterior wall of this canal, a large opening by which it easily penetrated into the bladder. Upon a careful examination of the diseased parts proceeding from without inwards, about the vulva, the perineum, and particularly on the internal and superior part of the thighs, a multitude of small, reddish tubercles were observed, hard and irregular, which seemed to be developed at these points entirely by the prolonged contact of the urine with the integuments. Besides this eruption, all of the skin contiguous to the genital organs was red, sensible, and hard to the touch; it was deprived of the epidermis in many points, and the urine which was continually discharged upon its surface produced smartings and very painful itchings. Except this, the genital organs presented nothing particularly noticeable.

The neck of the uterus examined with the speculum is normal. The fistula is situated on the anterior wall of the vagina, four centimetres behind the *meatus urinarius*, about five millimetres to the left of the median line, and is of a longitudinal form. Its dimensions in this course are more than six centimetres in extent, and its length occupies the greater part of the fundus of the bladder in such a way that it almost reaches the neck of the uterus. Its transverse diameter amounts to some centimetres; its borders are regular and seem as if cut; they are in a state of considerable and permanent distension; the orifice of the fistula remains open, and a portion of the bladder forms a hernia through this opening. The female sound introduced by the canal of the urethra, traverses the bladder, arises in the vagina, and may be brought back to the vulva if a see-saw movement is made.

As to the general state, it is satisfactory. The patient ardently desires the operation for which she has been for some days preparing, by the use of baths, injections, and clysters.

On the 2d of July, M. Jobert performed the operation in the following manner: Except the securing of the hands and feet together, the patient was placed in a position similar to that pursued in the operation for stone. The speculum with one valve was now introduced into the vagina, so as to depress its posterior wall; two assistants separated at the same time the large and small lips; this allowed the operator to perceive the neck of the uterus, and seizing it with the forceps of Museux he drew it outwards by light and moderate traction. The neck of the uterus in being displaced has drawn after it the fundus of the bladder, and consequently the fistula; this, presenting itself now at the entry of the vagina, became more accessible to the action of the cutting instruments. The borders were pared with the scissors and bistoury. This was the second step of the operation. A curved needle, armed with a double thread well waxed, was firmly fixed at the extremity of a needle bearer, and the left border of the fistula, being seized with a pair of forceps, was traversed by the needle from without inwards; this, deprived of its support, was brought back by the orifice of the fistula into the vagina. The needle being fixed to the extremity of the instrument was again introduced into the bladder, and penetrated from within outwards the corresponding border of the fistulous orifice; it was afterwards drawn into the vagina bringing after it the thread with which it was armed. This thread was thus disposed in the form of a loop to the inferior cavity in the thickness of the inferior lips of the fistula, in two corresponding points and about two lines from their inferior border. The two extremities of the thread were afterwards drawn out and maintained at the exterior, whilst, proceeding always from behind forwards, five other threads were successively passed through the corresponding borders of the fistula. All these threads were placed sufficiently near one another to prevent any free space from existing

between them after the lips of the opening were brought together. After having withdrawn the sound from the bladder an incision, five centimetres in length, was made upon the right side of the vagina and the part of this canal which corresponded to the fistula. This incision immediately relieved the tension of its lips and allowed them to be readily brought in contact. M. Jobert now seized the first thread, and drawing lightly upon the two ends, the borders of the fistula came exactly in contact. A double knot was made to maintain them in this position, when the two ends of the thread were cut, in order, so to speak, to smooth the knot. The four remaining threads were tied, and afterwards cut in precisely the same manner.

The neck of the uterus, being freed from the hooks, returned immediately to the bottom of the vagina, which was repeatedly injected with cold water, and the operation was completed by the introduction of a light tampon consisting of a cylinder of agaric (*Polyporus igniarius*). The patient was carried to her bed with a sound to remain permanently placed in the bladder. Infusion of tilia (*tilia Europa*) to be given in a draught, with one ounce of syrup of poppy. During the day the patient had very little pain; but during the night she had not a moment of repose. The urine has passed perfectly well by the sound.

The 3d of July, a little fever; pulse at 80; skin hot; considerable thirst. The urine continues to pass wholly by the sound. Tilia, antispasmodic syrup of gum.

4th. The fever no longer exists; the urine has flowed by the sound, nevertheless the cloths placed under the seat of the disease are wet in some points.

5th. The sound was obstructed during the night and a quantity of urine was found under the patient; but upon the introduction of a new sound the urine resumed its usual course.

6th. The sound gave passage to the urine; the same was the case the days following; nevertheless the patient com-



plained more than once that she felt the urine drop upon herself, and in the morning when it was changed the cloth was found wet.

From the 15th to the 24th of July, the urine passed almost entirely by the sound. The patient, moreover, had an appetite, tranquil sleep, and appeared to have entirely recovered from the operation.

On the 24th she was examined; one of the threads had fallen upon the posterior wall of the vagina; the others were cut with the scissors and drawn out by the forceps. When the finger was introduced into the vagina it was ascertained that the union of the fistula was complete. During the day the sound was not allowed to remain in the bladder; the patient was sounded very frequently, and every time nearly a glassful of urine was obtained.

The 25th, the sound was introduced and allowed to remain, and almost the whole of the urine passed through it.

The 29th, the patient was again examined, and the last portion of the thread removed from the vagina.

The 30th and 31st, a small granulation, seated in one of the points of the suture, was cauterised; the sound allowed passage to the whole of the urine.

August 5th. The patient was examined anew; the cicatrization was complete.

8th. The union seemed permanent.

13th. The sound was withdrawn. The next day the patient declared that she had micturated at will, and been able to retain her urine for quite a long time, but that nevertheless, there was a slight exudation into the vagina. On examination of the parts, nothing was discovered save a little point, almost imperceptible, situated at the posterior extremity of the cicatrix. This was touched with the nitrate of silver.

From the 14th to the 21st the sound remained, to be finally withdrawn on the 21st.

On the 24th, the patient affirmed that not a single drop of urine had flowed by the vagina. When the interior of the



vagina was examined with the speculum, there was found upon the right lateral wall the trace of the incision made at this point. A regular cicatrix at the place of the fistula was observed on the exterior wall; the cicatrix was distinguished from the surrounding tissues by reddish discolorations, and by slight irregularities existing at the points of the suture. The genital organs are perfectly healthy. The general health is most satisfactory.

The 27th December, the patient does not lose a single drop of urine, and is able during many hours' succession to retain a very considerable quantity of urine in the bladder. The disposition to urinate is felt less frequently during the night than the day.

The examination with the speculum reveals only the smallest trace of the ancient fistula; but to the left and right of the median line two perfectly white cicatrices are perceived, which are directed from behind forward. Along the course of the cicatrix of the left side, white depressions corresponding to the points of the suture, are observed. The anterior wall of the vagina has diminished very little in size. The orifice of the urethra has almost regained its natural calibre, and the abnormal granulations that it presented has yielded to a few cauterizations with the nitrate of silver.

Finally, the patient has recovered her cheerfulness, bloom, and *embonpoint*.

*Vesico-vaginal fistula of the fundus of the bladder.—Autoplastic operation.—Recovery.*

CASE II.—A woman, 24 years of age, and of strong constitution, entered Saint Louis hospital on the 3d of December, 1845. She had menstruated at the age of fifteen years, and married at twenty. Her first child had been extracted by the forceps, three days of pain not sufficing to effect its natural expulsion. She became pregnant a second time, was brought to bed at the full period, and as the labor was not more successful than the former had been, the cranium of the child was perforated, and the delivery effected by

means of instruments. The operation occupied almost two hours, and was followed by violent inflammation of the genital organs. The first days after the accouchement offered nothing particular; the urine was evacuated voluntarily, and did not, in fact, pass by the vagina until after the lapse of six days. It passed at first only in part by the fistula, the reason of which was that the eschar was only partially separated, for as soon as it became wholly detached, the urine passed altogether by this opening. From this period the urine escaped involuntarily and incessantly, whatever might be the position of the patient.

The following was her condition on admission into the hospital.

1st. The genitals are constantly bathed with urine.

2d. All the parts with which the urine was in contact were erythematous, red, or tuberculous.

3d. The vesico-vaginal wall was irregular, unequal, and furrowed in a way which denoted the existence of ancient losses of substance, and cicatrized ulcerations.

4th. The neck of the uterus was irregular and ulcerated.

5th. In the track of the urine calculous deposits were found.

6th. In front of the neck of the uterus the touch detected a depression where the vesico-vaginal wall appeared manifestly diminished in thickness.

7th. The introduction of a liquid into the bladder immediately revealed the site of the fistula, for as soon as it entered the bladder it escaped by the vagina in the form of a continued jet.

8th. The introduction of the speculum presented to the eye a hard depression formed by the inodular tissue, and at the bottom of which a large sound may be passed directly into the bladder. The instrument passed along the neck of the uterus, which seemed grooved in order to assist in the formation of the fistula. While the patient sits up she is able to retain a small quantity of urine in the bladder.

9th. The patient is irritable, agitated, and the intellectual

faculties sensibly disturbed. This is not the first woman in whom we have seen grave changes occur in the functions of the nervous system, on account of serious lesions of the bladder.

10th. When the patient coughs the urine escapes by jets.

The direction and extent of the fistula having been ascertained, and an operation being judged indispensable, M. Jobert prepared the patient by baths, emollient and narcotic injections, and purgatives. When in the proper condition, he practised, on 23d of December, the autoplasmic operation in the following manner:

The woman was placed upon a bed, the legs flexed upon the thighs, and the thighs upon the pelvis. The speculum with two valves was introduced and the neck of the uterus drawn to the exterior by means of Museux's forceps; then Jobert pared away from both the interior of the fistulous channel and the vaginal circumference of the fistula all the parts which seemed indurated. The vagina was afterwards detached from its connexion with the neck, when it immediately became easy to apply three points of the interrupted suture in order to maintain the lips of the fistula in contact. The bleeding surfaces were thus brought together without any difficulty, and without the slightest distension.

A sound was afterwards placed in the bladder, and an oat-chaff cushion under the knees.

On the day of the operation a sanguinolent urine first passed by the sound, but soon became clear and transparent. There was a little vesical tenesmus for sometime after the operation, but the pulse remained at 70.

On the 24th, the patient was allowed some broth; nothing particular was observed.

25th. A slight vesical tenesmus reappeared, but there was no fever nor any untoward symptom. In the afternoon she withdrew the sound and evacuated her urine spontaneously.

26th. The urine flowed by the sound alone until in the

afternoon, when the patient withdrew and afterwards returned it without experiencing any inconvenience.

28th. The patient was not more manageable than she had been the preceding days, but urinated in part by the canal and in part by the sound.

Until the 11th of January she at times allowed the sound to remain, and at times withdrew it, and notwithstanding all these indiscretions, as we shall see in the end, she was completely cured.

The threads had been permitted to remain, and it was not until the 11th of January that the neck of the uterus was examined previously to their removal. The urine at this time (11th January) no longer passed by the fistula, but escaped in a continued jet from its reservoir whenever the patient endeavored to urinate, and she was able to retain a large quantity for a considerable length of time. When the speculum was introduced one of the threads used in the suture was discovered, and removed with the forceps.

January 15th. The patient had frequent desire to micturate; the speculum being again introduced, another thread was found and withdrawn. In the course of the following days the irritability of the bladder disappeared; all the urine was passed by the urethra.

Until the 6th of February everything progressed in the most favorable manner, notwithstanding the indocility of the patient, who had been over and over again guilty of imprudences, quite sufficient to compromise the cure of the fistula. She was on the point of being sent to her family, when, on the night of the 7th, she was seized with a well-marked paroxysm of mania. At the visit the next day, she was found in a state of considerable agitation; she did not utter a single word; the face was animated; eyes haggard; pulse accelerated. [Venesection; twenty leeches upon the mastoid processes; ice to the head.]

The maniacal condition continues; the patient sings, and is continually endeavoring to escape; great incoherence of ideas. [The straight-jacket was applied; fifteen leeches be-

hind the ears; antispasmodic draught; vaginal injections.] From this time until the 12th of March she has almost uniformly refused to reply to the questions that have been put to her, and although the restlessness has been less, her reason is constantly disordered. New bleedings have been practised, many blisters applied to the neck and the mastoid processes, without producing any notable amelioration in the condition of the intellectual faculties. In this state the patient was removed on the 12th of March to a lunatic hospital. The examination with the speculum revealed the final result of the operation, which the patient had undergone. The neck of the uterus being seized and drawn towards the vulva, the point of the bladder which had been occupied by the fistula was easily recognized; there remained in its place a linear cicatrix a little depressed, a centimetre and a half, or thereabouts in extent, very solid and in every respect perfect, no fistulous opening remaining on its surface. When pressed with a compress or pair of forceps, it remained dry, furnishing not a drop of urine. The cure of the fistula was radical and complete.

CASE III—relates to a Creole woman, aged 35 years, who had labored for ten years under a vesico-vaginal fistula with loss of substance, for which two operations had already been attempted without success. The fistula consisted of an enormous transversal slit about thirty-seven centimetres in size seated at the fundus of the bladder, entirely behind the level of the neck of the uterus, in such a way that the latter organ formed, in some manner, the posterior lip. The borders were hard and callous, the neck of the uterus itself diseased, ulcerated, and softened; the vagina indurated, painful, and presenting in various points calculous deposits, notwithstanding the incessant care and attention to cleanliness on the part of the patient.

M. Jobert operated on this patient on the 21st of October, 1846, in the presence of Professors Begin, Bouillaud, and others. The circumstances attending, and the phenomena



which followed the operation are embodied in the preceding cases, it only remaining to be added here that there was no traumatic accident, and that from the time of the operation not a single drop of urine passed by the fistula, but the whole of it was discharged by the urethra, which had not given passage to it before for ten years. The first of the threads was removed on the 1st of November, when the adhesion of the lips of the wound was perfect, and on the 5th the union was already very solid.

On the 11th, the sound was withdrawn, but was introduced every two hours, and in the intervals the urine accumulated in the bladder; sometimes a few drops escaped by the urethra, but none passed by the fistula.

On the 22d, the patient urinated without assistance, and was able to retain the urine.

27th. The menses, suppressed for the last ten years, and replaced by an anal hemorrhage, were re-established, and on the 5th of December, when the patient was examined by Professors Begin, Bouillaud, &c., she was perfectly cured, and on the 10th set out for Marseilles.

Vesico-vaginal fistulæ, and particularly those affecting the fundus of the bladder, are among the most frightful infirmities to which the female is liable after difficult labors, and, when of considerable extent, are even now regarded by many of the most eminent writers in the profession, as beyond the reach of surgical art. But from these cases of M. Jobert we are justified in forming a more favorable prognosis. This surgeon stands deservedly high in France, and his reports may be confided in for accuracy and fidelity. His operations unquestionably have a title to a very high rank among the achievements of modern surgery. He promises at a future meeting of the Academy of Sciences to give the physiological and pathological reflections suggested by these cases.

While Germany has given to war, in the past year, another element of destruction in the cotton-powder; and France

has assigned to Neptune, the fabled god of the seas, a place among the stars, America has made a richer offering to humanity in disclosing the precious virtues of the vapors of sulphuric ether. If the conquest of a new agent of attack and defence, if the discovery of a star, before unknown in the firmament, creates so lively an interest in the mind of every one, what should be the sensations caused by the application of an agent through whose mysterious powers the human constitution is made insensible to the pain attending surgical operations?

To Jobert belongs the merit of having made the first attempt, in France, to intoxicate with the vapors of sulphuric ether; his subject was a patient from whom he wished to remove a cancerous tumor of the lip. But from the defective apparatus for its administration, and some other unfavorable circumstances, his patient, though a man 59 years old, and though evidently affected, was not brought sufficiently under the influence of the ether to lose his sensibility, and thus the first experiment was considered as rather contradictory of the reports from the other side of the channel, where, at that time, the power of the ether to allay pain in surgical operations was verified every day. Malgaigne, also of St. Louis hospital, was the first French surgeon who succeeded in producing, by the gas, a degree of insensibility sufficiently great to destroy the pain of an operation. To the Academy of Medicine at its session on the 12th of January, the last named gentleman communicated the history of five cases in which he had used the ether, of which the following is a detailed account.

I. A young man, aged 18 years, having a suppurating phlegmon at the inferior part of the leg, was made to inhale the sulphuric ether for ten minutes, which sufficed to plunge him in a complete lethargy or sleep, during which the abscess was opened with a bistoury. The patient raised up half a minute after, declaring that he had felt nothing, and he did not even believe that he had undergone the operation.

II. An Italian, somewhat older, affected with a tumor of the neck, breathed the ether for five minutes; after returning to himself he said that, although he had been conscious that the tumor was being removed, he experienced no pain.

III. A young woman presenting also a tumor of the neck, lost consciousness after inhaling the ether for ten minutes, and although she did not feel the first incision, she recovered immediately after and suffered during the remainder of the operation as much as if she had not inhaled the ether.

IV. A man who had had his leg crushed by a railroad car passing over it, before submitting to its amputation, inhaled the ether for seventeen minutes, when lethargy being produced the limb was removed, and after he had recovered from his stupor, he declared that notwithstanding he had been conscious throughout of the removal of the limb, he had felt no more pain than if it had been slightly scratched with the point of a pocket knife.

The fifth and last operation was for strabismus in a young man; he breathed the ether for ten minutes without its seeming at all to affect his constitution, when he relinquished the attempt, and, of course, suffered during the operation as would a patient under ordinary circumstances.

Professor Roux obtained, a few days after, an incomplete result in a man aged 45 years, who had fallen on the pavement and broken his leg, which, from the severe consecutive lesions, finally required amputation. The patient inhaled the ether for twenty minutes, at the end of half of which time his eyelids fell, but he still answered questions.—The operation occupied twenty minutes, and I am inclined to believe that the man, in whom the pain was notably diminished, would not have cried out had not the students from all parts of the theatre repeatedly shouted, "Cry, cry, why don't you cry, now?"

The *Gazette des Hôpitaux*, of the 19th of February, contains three other cases of the inhalation of the vapor of ether, presented in the wards of Malgaigne. A man, 35

years old, of a nervo-sanguineous temperament, presented, at the internal and inferior part of the right leg, and on the surface of the right internal malleolus, a phlegmonous abscess. Two or three minutes sufficed to put the patient into a state that may be compared to intoxication; indeed intoxication is the word generally used now in Paris in referring to the effects of the ether. After he had answered affirmatively to the questions, whether he felt anything peculiar, whether his sight was troubled? etc., M. Malgaigne, with a bistoury, made on the surface of the abscess and portion of the skin, abundantly supplied with nervous filaments and manifestly inflamed, a longitudinal incision about three or four centimetres in length. The borders of the wound were pressed in order to expel the pus contained in the abscess, during the whole of which procedure the patient gave no sign of pain. The operation being completed, the patient appeared agitated and nervous; his face became red, and his features contracted, the eyelids tightly closed, the muscles in general, and especially those of the face and superior extremities, appeared in a state of abnormal contraction; and from the manner in which, with his eyelids still fast shut, he spit his saliva about in every direction, it was evident that he had lost his reason. This condition of things, however, lasted only two or three minutes, when being interrogated as to what he had felt during the operation, he replied that the pain had been slight, and he knew of no better comparison than to liken it to a slight prick with a sharp instrument. Immediately after his return to consciousness the patient complained of pain, if the lips of the wound were pressed with the finger.

A man, aged 45 years, affected with whitlow of the index finger of the right hand, which made it necessary to remove the member, inhaled the vapors of the ether, at first without effect, owing to the stupidity of the patient who was unable to understand how it should be breathed. However, after he was made to comprehend the mode of inhaling it, it pro-

duced intoxication in four minutes, albeit not as perfect as in some other cases, but still to a sufficient degree to diminish the pain so much that he too compared it to a slight prick. The pulse of the patient rose to 88 during the inspiration and attained 92 after the operation.

A girl, about 18 years old, having an affection of the right hand, for which Malgaigne wished to make an incision, was submitted for four minutes to the inhalation of the ether, when the sight became troubled, and an incision of four or five centimetres in length was made on the back of the hand. The sensation experienced was compared by this patient also to that caused by a pricking instrument. What was especially remarkable in this case was the insensibility, a species of stupor, or rather the numbness of the wound, which persisted for a much longer time than in the other patients. For a number of minutes after the operation the fingers or stylet might be plunged into the wound without the patient complaining of any pain. Finally, the sensibility returned, and the patient said she had a burning or scalding sensation on the surface of the wound.

The wards of Prof. Bouillaud, of course, afford no surgical cases, but, as it is fresh in my mind, I may mention a very striking example of the powers of the ether in a young chlorotic girl, who had a very painful and slightly decayed molar tooth, requiring extraction. After inhaling the ether for six minutes her eyelids closed, and she gave every evidence of intoxication. Her mouth was fast shut, however, and the *externe*, who was acting dentist, was quite at a loss how he should introduce the turn-screw; but the patient, while apparently unconscious of everything going on around her, on being told to open her mouth, immediately did so, and although three different attempts were made before the whole of the tooth was extracted, she gave not the slightest manifestation of pain, and on recovering, to the question of whether she had suffered, she replied, "not in the least."

A similar operation, rather more skilfully performed how-



ever, attended by similar success, occurred the morning before, while I was in the ward; but so perfectly still was the patient—who on regaining consciousness testified in terms equally strong to the total absence of pain—that I was not aware of it until it was over. I learn from M. Bouillaud, the *chef de clinique*, that several other teeth have been drawn from patients in his wards under the influence of the ether, and in every instance with the most perfect success.

Among the first, if not the first patient whom Velpeau endeavored to intoxicate with the ether, was a man who, after having inhaled it for fifteen minutes without its producing the desired effects—which was attributable, I think, to the fault of the apparatus, an ungainly fixture that had been constructed in the hospital—had his finger removed amid as much pain as this operation usually occasions. Velpeau, on the 22d of January, provided with a much better apparatus, proceeded to remove a tumor about the size of the head of a small fœtus, one similar having already been twice removed, occupying the posterior and superior region of the left thigh. The patient being placed on his belly, had scarcely breathed the ether for four minutes when his head fell upon the pillow, he ceased replying to questions, and his limbs were in a state of complete relaxation. Velpeau removed the tumor in less than two minutes; tying the vessels required a little more time; the patient moved, the apparatus was placed before his mouth, and he awoke no more till the dressing was applied. On being asked if he had suffered, he replied that he had not, but on the contrary had felt exceedingly comfortable, and assured M. Velpeau that this new method was *la bonne methode*.

Larrey, one of the assistants, being struck by the relaxation of the muscles of this individual, suggested that the ether might be of value in the reduction of luxations, by controlling the violent muscular contractions in robust subjects. A short time afterwards he had the pleasure of seeing, in the same room, a dislocated shoulder joint, in a very powerful man, which had resisted all attempts at reduction, easily returned to its proper position when the patient was brought under the

influence of the ether. When it is remembered that the subject of the preceding observation had submitted twice to the same operation, previous to the discovery of the powers of the ether, it becomes one of the most conclusive facts in its favor.

The next, a case that occurred in the service of Vidal, at *Du Midi* hospital, seems to prove that the ether may exaggerate instead of lessening the sensibility. The patient, æt. 24 years, laboring under a varicocoele, was given the ether without success, owing to the difficulty which he experienced in properly inhaling it. The next day, however, intoxication was produced in the course of twenty minutes, but, unlike any of the former examples, it made the patient very gay, while it rendered his sensibility much more acute.

Another case in which the sensibility was greatly augmented, I saw in the amphitheatre of Prof. Roux. In this instance the patient, who had an abscess of the neck, after breathing the ether for a considerable length of time, suddenly jumped from his chair, commenced screaming, and made various rapid and excited gestures. Being very soon reseated, the professor plunged the bistoury into the abscess, which seemed to give great pain, and the patient expressed himself as having suffered excessively.

It is a question in my mind whether, if this patient had been made to inhale the ether for some moments longer, insensibility and stupor would not have been induced. The opinion of many of the Paris surgeons, as set forth in the medical journals, seems to be opposed to continuing the inspiration of the ether in refractory subjects, that is, in those who become excessively agitated and excited. But in support of the hint thrown out—which, however, I by no means claim as my own—I will refer to several cases in which the sensibility, greatly augmented at first, declined at a later stage, and the patients, sometimes in the liveliest and at other times again in rather furious moods, have, after carrying the intoxication still farther, become lethargic, and in neither gave evidence of pain, nor preserved any recollection of having suffered during

the operation. For instance, I witnessed a case of this sort in the service of Velpeau, while I was following a private course at La Charité. The subject, a coachman, had a tumor situated in the region of the parotid gland, where operations are known to be peculiarly painful. The ether soon produced its effects. During the first half of the operation the patient did not move; towards the end, however, he became a good deal agitated, his brows contracted, and he showed a disposition to rise from the table, but the ether was reapplied to his mouth and he again became tranquil. On being asked, when the intoxication had subsided, why he had acted so, he said he had dreamed that he was in a billiard room playing a game with his friends, and getting into a dispute with them, he thought some one in the midst of the quarrel had mounted into the seat of his carriage, which he had left at the door, and was driving off; he was endeavoring to go out and stop him. Another instance of similar bearing I saw on the operating table of Blandin, in a woman of nervous temperament, who, after breathing the ether for a few minutes, became very much excited, attempted to pull the tube from her mouth, and would have succeeded in doing so but for the efforts of two assistants. In a short time she became calm, her head fell back on the pillow, and Blandin striped her knee four times with the actual cautery without her feeling any pain, or even believing, when she recovered her consciousness, that the operation had been performed, until the trace of the iron was shown to her.

M. Guersant, jr., surgeon to the Children's Hospital, among many other cases which I shall not detail, administered the ether to two girls before performing on each a very painful operation. The first, aged 12 years, after inhaling the ether for only two minutes, appeared completely insensible during the whole of the time occupied in the disarticulation of the index finger. Towards the end of the operation, she commenced crying, and, after recovering, said she felt him pulling the flesh, and had wished to cry but found it impossible to do so; and she stated, moreover, that she had very distinctly felt

him pinch it twice before he removed the finger. The other patient, likewise 12 years of age, after inspiring the ether two minutes, appeared plunged in a profound stupor. The first incision was made without any manifestation of pain, but M. Guersant had hardly introduced his finger into the wound before the patient screamed violently. She was again made to inhale the vapors of the ether, and the operation was terminated without her giving any other sign of suffering. Her pulse became very small and slow, and remained for quite a long time in this state. The patient had no recollection of having suffered any pain.

On the 19th of January, M. Jobert amputated the right thigh of a young man twenty-four years of age. He became very gay after inhaling the ether for twenty minutes, but soon after showed all the symptoms of intoxication, accompanied with threats and menaces; so violent, indeed, was his excitation, that he was obliged to be held while Jobert removed the limb. The operation being completed, the patient was shown his lost member. With a very long face, he said he "regretted that he could no longer dance as formerly," but, soon brightening up, congratulated himself "that he would no longer be annoyed by a corn on one of his toes." The tying of the vessels gave more pain than the amputation.

M. Gerdy presented to the Academy of Sciences, on the 25th of January, several cases of patients submitted to the vapors of ether, of which the following epitome may be interesting:

A young girl intoxicated, or benumbed, if you think the word preferable, with the ether, lifted her hand to her neck, but uttered no cry, while an incision was being made there; she returned to consciousness a few moments after, laughing most heartily, but did not speak of the incision on her neck; while walking to her bed she staggered a good deal.

A patient operated on ten or twelve days before for a strangulated hernia at the groin, allowed the intestine to escape below the cicatrix of the first operation; Gerdy attempt-

ed reduction, but the patient evidently suffered during these efforts, notwithstanding the inhalation of the ether.

Another patient, who was the subject of a cataract for which Gerdy wished to operate by extraction, was made lethargic by the ether. He pricked and pierced the cornea, but the eye became so unsteady that he was obliged to abandon the operation. Gerdy attempted now to depress the cataract, but the eye continued so unsteady that he was compelled to relinquish this also. He then pricked the nose and lips and afterwards the hand of the patient, who on returning to himself, although he remembered very distinctly having been pricked, did not speak of any pain felt in the nose or lips.

In the case of a patient who had been operated upon a short time previously for a fistula in ano, which had not progressed as favorably as could have been desired, the matter having burrowed beneath the integuments, it became necessary to remove a portion of the skin near the anal orifice. The patient inhaled the ether until its characteristic effects were produced, when the operation was performed, and although he suffered much less from this procedure than had been caused by the mere dressings the day before, still he experienced some pain.

A young woman was able to undergo a dilatation of the vagina after breathing the ether, which she could not bear before. She returned to herself soon after, became excessively gay, and was at first incapable either of walking or supporting herself.

I saw M. Boyen amputate the leg of a woman about forty years old, of nervo-sanguineous temperament, who had been rendered insensible by the vapors of the ether. She did not make the slightest movement, and, on the effects passing off, said that she remembered nothing of what had been done to her.

A woman of the same age and temperament had a tumor of the right breast, which I saw Blandin remove while she was under the influence of the ether, without her making any de-



monstration of suffering, or retaining any recollection of the operation.

Velpeau amputated the leg of a young man previously inebriated by the ether, without his giving the least evidence of suffering. When the third arterial ligature was applied, he cried out, but on returning to himself he did not know why he had done so, for he had felt nothing; and, in accounting for the incoherent sentences uttered by him towards the end of the operation, said they had arisen from his having thought of the unfortunate condition of his family.

On another occasion Velpeau removed a portion of the hand of a young man who had been made insensible by the ether. During the first part of the operation he did not move, but before it was finished he became agitated, made gestures as though he wished to escape, and seemed to suffer pain; but on recovering his sensibility he declared that he had felt nothing, and that his movements were occasioned by his dreaming that he was endeavoring to separate two of his comrades in a quarrel.

About the same time, Velpeau removed a man's eye who was under the influence of the ether, and who said, when the operation was over, that although he was conscious of what was going on, he had not suffered the least pain.

Velpeau opened an abscess in the breast of a young woman who had breathed the ether but six times; this was sufficient to intoxicate her, and when she recovered her consciousness she exclaimed, "Why did you not operate upon me while I was asleep?"

Some time before, a man entered his wards at La Charité with a fractured thigh. The subject was robust, vigorous, and extremely muscular; he was also excessively impressible, was affected with a species of convulsive movement, and it seemed as though it would be difficult to restore the wounded limb to its normal form and strength. After breathing the ether for some minutes he became insensible, although he was somewhat agitated and spoke incoherently, but his muscles were relaxed, yielded to the least traction, and al-

lowed the member to be reduced with the greatest possible facility. When all was finished, the patient said, on recovering his consciousness, that he had not been aware of a single thing that had been done, and only complained of having had an unpleasant dream.

Another patient, a young girl who was subject to nervous attacks, was submitted to the influence of the ether a day or two before it was proposed to remove the nail from her great toe. She soon became insensible, but, on recovering from this state, was taken with a convulsive fit. The next day a new administration was again followed by insensibility, which, as before, was succeeded by convulsive paroxysms; but as the patient complained in no respect, the ether was again administered, and the operation performed without her feeling the slightest pain. On recovering she experienced a long and very intense convulsion. During the operation she raised herself up as if to see what was going on; but she felt nothing, and did not reply to any of the questions put to her. She has since said that she dreamed of assisting at a wedding. M. Velpeau asks, "If the nail had been removed without making her breathe the ether, would she not have had equally, perhaps more violently, these convulsive movements?"

A young physician who experimented upon himself, became insensible very soon without losing his consciousness; he was even able to indicate various experiments that he wished performed, and he stuck pins and a lancet into his flesh without feeling them.

† There have been many other examples where the patients continued to see, hear, taste, smell, and perceive what was passing around them, while their sensibility for the time being was totally abolished. This preservation of the ordinary powers of sensation and complete loss of all abnormal feelings, has suggested the following question to the mind of Malgaigne: "Are there in the brain two centres of sensation, one for the normal and the other for those which are abnormal?"

The following is a list of the operations performed in Paris up to the 1st of March, with the names of the hospitals and of the operators:

## HOTEL DIEU.

*Prof. Roux.*—Amputation of the leg, 1; amputation of the thigh, 1; amputation of fingers, 3; tumor of the breast, 1; tumor of the face, 1; removal of necrosed bone, 1; lachrymal fistula, 1; fistula in ano, 2; phymosis, 1; incisions, excisions, etc. 30.

*M. Blandin.*—Amputation of one of the bones of the foot, 1; amputation of the breast, 3; fistula in ano, 1; cauterization with the red iron, 5.

*M. Boyer.*—Amputation of the leg, 1; amputation of the finger, 1; removal of a finger nail, 1; moxa, 1.—Total, 56.

## LA CHARITÉ HOSPITAL.

*Prof. Velpeau.*—Amputation of the leg, 1; amputation of the breast, 1; sarcocele, 1; partial amputation of the breast, 1; removal of a cancerous tumor on the thigh, 1; removal of a parotid tumor, 1; extirpation of the eye, 1; partial amputation of the hand, 1; puncturing abscess of the breast, 2; fistula in ano, 2; excision of the amygdalæ, 1; removal of the finger nail, 1; reduction of a luxation of the thigh, 1; reduction of a luxation of the elbow, 1; reduction of a fracture of the thigh, 1; injection of iodine into the articulation of the knee, 1.

*M. Gerdy.*—Cataract, 1; amputation of the forearm, 1; removal of polypi of the nose, 1; seton, 1; reduction of hernia, 1; incisions, excisions, etc. 4.—Total, 27.

## ST. LOUIS HOSPITAL.

*M. Jobert.*—Amputation of the thigh, 4; amputation of the leg, 1; amputation of the arm, 2; tumor of the breast, 2; various tumors, 3; fistula and fissure of the anus, 2; cauterization with the red iron, 2; reduction of a luxated shoulder, 1; hydrocele, 1; incisions, excisions, etc. 20.

*M. Malgaigne.*—Amputation of the leg, 1; removal of tumors, 2; amputation of fingers and toes, 4; incisions, excisions, etc. 10.—Total, 55.

## BEAUJON HOSPITAL.

*M. Langier.*—Amputation of the thigh, 3; amputation of the leg, 1; excision of tumor, 1; strangulated hernia, 1; moxas, 1.

*M. Robert.*—Amputation of the leg, 1; section of the tendo Achillis, 1; reduction of a luxation of the elbow, 1.

*M. Bouvier.*—Section of the tendo Achillis, 1; strabismus, 1.—Total, 12.

## HOSPITAL DE LA Pitié.

*M. Giralvés.*—Amputation of the thigh, 1; amputation of the big toe, 2; removal of a tumor, 1; hydrocele, 1; removal of a toe nail, 1; incisions, 2; cauterization with the red iron, 4.—Total, 12.

## CHILDREN'S HOSPITAL.

*M. Guersant.*—Operation for stone, 1; amputation of the thigh, 1; amputation of the arm, 1; amputation of fingers and toes, 5; fistula in ano, 1; cauterization with the red iron, 1.—Total, 10.

## COCHIN HOSPITAL.

*M. Michon.*—Amputation of toe, 1; lithontripsy, 1.—Total 2.

## HOSPITAL DE BON LE-COURS.

*M. Denouvilliers.*—Amputation of a finger, 2; excisions, incisions, etc. 18.—Total, 20.

## MAISON ROYALE DE SANTÉ.

*M. Monod.*—Amputation of a finger, 1; amputation of a breast, 1; circumcision, 1.—Total, 3.

## HOSPITAL DES CLINIQUES.

*M. Voilemier.*—Amputation of a leg, 1; amputation of an arm, 1; other operations, 8.—Total, 10.

## DU MIDI HOSPITAL.

*M. Vidal.*—Varicocele, 2; phymosis, 1; strabismus, 1.—Total, 3.—Grand total, 211.

Of these there were of amputation of the thigh, 10; amputation of the leg, 8; amputation of the arm, 4; amputation of the forearm, 1; partial amputation of the foot, 2; partial amputation of the hand, 1; amputation of fingers and toes, 19; total or partial amputation of the breast, 8; extirpation of im-

portant tumors in different regions, 12; removal of the eye, 1; sarcocele, 1; strangulated hernia, 1; stone, 1; lithontripsy, 1; hydrocele, 2; varicocele, 2; phymosis, 4; fistula or fissure of the anus, 8; reduction of luxations or fractures, 5; reduction of hernia, 1; removal of nails, 4; extirpation of amygdalæ, 1; polypi of the nasal fossæ, 3; cataract, 1; lachrymal fistula, 1; strabismus, 2; section of tendo Achillis, 2; cauterization with the red iron, 12; application of moxas, 2; opening abscesses, incisions and excisions of various sorts, 91.

Of these the following terminated fatally: Amputation of the thigh, 4; amputation of the leg, 3; amputation of the arm, 2; amputation of the forearm, 1; amputation of a toe, 1; amputation of a finger, 1; amputation of a breast, 2; extirpation of tumors, 3.—Total, 17.

Thus in 10 amputations of the thigh there have been 4 deaths, that is, 2 in 5; while in a report by Malgaigne, made in the *Archives of Medicine*, entitled "*Statistical Studies upon the Results of the Large Operations in the Paris Hospitals*," we find that from the 1st of January, 1836, to the 1st of January, 1841, there were 201 similar operations performed, of which 126, or 3 in 5, had a fatal termination. During these five years, there were 852 amputations of members, from disarticulation of the thigh to amputation of the phalanges, in which the general mortality was 332, or about 2 in 5. Of the 23 operations which represent the amputations of the thigh, arm, and forearm, 10 have died, or about 2 in 5. The statistics of M. Malgaigne give 512 amputations of the same kind, and 281 deaths, or nearly 3 in 5.

I have gone into these details for the twofold purpose of showing the rate of mortality in hospital operations in Paris, and of estimating, if we may, the effect of ether upon this mortality. The number of operations is yet too small to justify any definite conclusions upon the last of these points, though it must be admitted that, as far as they go, they in no wise support the assertion of Magendie, that the influence of the ether upon the constitution is deleterious, and would in many cases dispose the operations to unpleasant terminations.



I saw M. Velpeau yesterday morning, (March 22,) who told me that he had operated upon more than forty patients who had breathed the ether with almost uniform success, that is, with various manifestations, had become more or less intoxicated and insensible to pain; and that he did not believe that he could lay to the charge of the ether the fatal termination in a single instance.

The effects of the ether are as various as the constitutions and temperaments subjected to its influence. In some it produces excessive hilarity, and in others anger; now exciting joy, and again sadness; now inducing the calmest and pleasantest, and again the most troubled and painful slumbers; in some persons giving rise to delightful dreams, and at other times awakening those of an unpleasant character, or steeping the faculties in total unconsciousness; now producing the most profound insensibility, but again affecting the constitution slightly, and in still rarer instances exalting all the sensibilities. The lover, under its influence, has often dreamed of his mistress, and very many women have dreamed, while intoxicated with it, that they were in heaven.

But this agent, so varied in its effects, and generally so benign in its action, like all substances of intense power, must be used with certain precautions. Already harm has been done by it; death has been produced by insisting on its application in cases where the subject was violently opposed to its inhalation; and, indeed, in instances where there was no repugnance on the part of the patient to be overcome, unpleasant, and, in one case, fatal pectoral symptoms have been traced to its action. The fatal case occurred in the service of M. Jobert, at the hospital St. Louis, and this surgeon has had the candor to avow his belief, that his patient died of a bronchitis brought on by the ethereal inhalation. Statements of this sort would not have been believed, in France or England, four weeks ago; but the rage for the "*letheon*" is beginning to subside, and the faculty of Paris are now scrutinizing its effects, and endeavoring to determine the circumstances which render its application hazardous. Mr. Liston foresaw

and predicted some of the evils which would flow from the indiscriminate use of so powerful an agent. And yet there are those in this city who still profess to doubt whether it has ever done harm in any instance. Velpeau is one of these, and treats all the fears on the subject with derision, holding the agent to be one of equal safety and efficiency. Time and experience must determine the matter. I remember that some cases of phrenitis were published in your Journal two years ago, which were ascribed to the inhalation of ether. If it be capable of doing mischief, we shall not long want evidence of its power, for the hourly administration of it to patients in all conditions, and almost every disease, must soon develop its capacity for evil as well as good.

Since writing the foregoing, I have seen in a Marseilles journal, that M. Pertusio, surgeon of a hospital at Turin, has obtained a very happy result by the aid of etherization in a case of well marked traumatic tetanus. On the 4th of February, a young man was attacked with tetanic symptoms, which by the 13th attained the greatest intensity. It occurred to M. Pertusio that the vapors of ether might avail in the case, and the result of the trial was, almost immediately, the complete relaxation of the muscular rigidity. The tetanic symptoms recurred, however, so soon as the etherization passed away, but were again relieved by its application, which was repeated as many as six times a day. Gradually the symptoms becoming less violent, and recurring at greater intervals, the ether was administered less frequently, and at the end of a week a single etherization each day was found sufficient. The 4th of March, now already eight days since, the patient had not experienced any tetanic symptoms, although the ether was no longer resorted to, and the patient walked about in the ward of the convalescents, retaining merely a slight stiffness in the muscles of the abdomen.

In my next letter I shall have something to report concerning the experience of M. Paul Dubois with ether in cases of difficult labor. For the present, I think you will agree with me, that I have said enough on the subject.

Paris, March 31, 1847.

**ART. II.**—*Notes on Medical Matters and Medical Men in Paris.* By  
DAVID W. YANDELL, M.D., of Louisville, Ky.

I should, according to promise, proceed now to give an account of the use of sulphuric ether by the Paris obstetricians in cases of difficult labor, but so much has already found its way into the journals on this subject that I have hesitated about fulfilling my promise. I am the less inclined to add any thing at present to the numerous details published, because I perceive that some of our own practitioners have made application of the new agent in such cases, and suppose that before this letter can reach you the subject will have grown old in America. Before now, it may be presumed, trials have been made with it by many of our own physicians, and I should not wonder if reports of its successful employment were to go forth with this letter from some of your correspondents. Leaving the subject, therefore, for the present, I

go on with my usual report of such interesting novelties as I see in the hospitals, and meet with in the European journals of medicine.

*Ergotine in external hemorrhage.*—At the meeting of the Academy of Sciences of the 22d of March, a letter was read from M. Bonjean, a physician at Chambourg, giving an account of some successful experiments with ergotine in external hemorrhage. He had made a previous communication on the same subject, I believe. He mentioned a case in which the radial artery had been severed, hemorrhage from which was arrested without ligature; and he also stated that ergotine had been successfully used in the treatment of scurvy.

*Solvent for stone in the bladder.*—The secretary of the Academy of Naples, M. Ferdinand de Luca, wrote a letter to the academy, in which he states that M. Cervelleri, a surgeon of the military hospital of Naples, has succeeded in dissolving stone in the bladder of living persons, by the use of electricity. He mentioned, however, only one case, from which, of course, one cannot pretend to appreciate the merits of the experiment. The patient in this case was a female, and the stone being placed in contact with the wires from a voltaic battery, was reduced in half an hour, and without pain, to fragments sufficiently small to be voided in the natural way.

M. de Luca alludes to several other cases, and as the question is one of such importance, I regret that he did not enter into those details and advance that proof which science requires.

*Ether in its effects on the blood and in pregnancy.*—At the sitting of the Academy of March 8th, M. Roux communicated the results of some experiments with the inhalation of ether on patients. In some cases, he states, the patients lose the equilibrium of motion without the slightest disturbance of the intellect, and that the suffocation from ether differs from all others, and particularly from that caused by carbonic acid, in which the blood, completely deprived of its oxygen, is black,

whereas with all persons whom he had etherized, the arterial and venous blood retained the natural color. The blood, however, according to Messrs. Lenoir and Voillemier, and many other surgeons, has greater fluidity than when in a normal state.

M. Jacques Cardan gave an account of some serious results from the administration of ether to females in a state of pregnancy. He considers it highly improper to etherize women when in this condition.

*A new sign of real death.*—M. Bouchut made a statement relative to the pretended discovery of the means of distinguishing real from apparent death by burning. It has been asserted, by some one in Germany, if I am not mistaken, that if life be in the body, a burn of the second degree will cause a blister to rise, whereas no blister can be raised by this means upon a corpse. M. Bouchut states that he tried the experiment upon four dead bodies, and produced blisters precisely similar to what would have been raised by the same means on the living subject. Bouchut but confirms the experiments already made, and with similar results, by several other surgeons. He proposes, as the best means of ascertaining whether life be extinct or not, a prolonged auscultation of the region of the heart; but he does not pretend that this alone is conclusive.

*Nervous fluid and electricity.*—At a meeting of the Academy of Sciences, March 15th, M. Dumas communicated a note from M. Matteuci on the nervous fluid and the influence of electricity. His conclusions are as follows:

1. The nervous fluid is produced by the chemical action of nutrition.

2. It is principally developed in the muscles, and, possessed of a repulsive force between its parts, like the electric fluid, keeps the elements of the muscular fibre in a state of repulsion similar to that presented by electrified bodies.

3. When the nervous fluid ceases to be free in the muscle, the elements of the muscular fibre are attracted to each other.



4. The nervous fluid constantly penetrates into the nerves and thence to the brain, assuming in these parts a new state, which is no longer that of a free fluid. According to the quantity of the fluid which ceases to be free in the muscle, the contraction is more or less strong.

5. This state is that of the nervous current, or the kind of discharge, which proceeds from the nervous extremities to the brain, and returns in a contrary state by the action of the will.

6. When this discharge takes place, the muscular contraction ensues, the fluid ceasing to be free in the muscles.

7. This discharge of the nervous fluid, acting as in electrical fishes, explains the contraction in both cases, and by the same arrangement of the parts the nervous current produces an electrical polarization.

8. The electric current prevents the nervous discharge if it be directed in the same state, which is the direct current: the nervous fluid not being able to enter and concentrate itself in the nerve, the latter loses its excitability; the contrary ensues for the opposite current, by which the nervous fluid accumulates in the nerve and augments its sensibility.

*Ether injected into the bloodvessels.*—I forgot to mention that at the sitting of March 22d, M. Flourens communicated the result of some experiments as to the action of ether taken internally and injected into the arteries. He administered to a number of dogs sulphuric ether in doses varying from six to twenty-four grammes. All of these animals, says M. Flourens, suffered severely, and some of them died; others were intoxicated, but not one was etherized, that is, struck with general and total insensibility, which is the characteristic condition of etherization. Neither, says M. F., did the injection of ether into the arteries produce etherization, but it produced what he termed “a phenomenon:” when an animal is subjected to the ethereal inhalation or ingestion, the spinal marrow loses the principle of feeling before it does that of motion. This is

not the case when ether is injected into an artery; motion then ceases before insensibility to pain commences.

*Acupuncture in aneurism.*—The Scientific Congress of Genoa having appointed a committee, in September last, to examine the effects of electro-puncture employed as a means for coagulating the blood in the arteries, and causing their obliteration, Dr. Arson, the chairman of this committee, has made a report, of which the following are the principal conclusions:

1. By means of the electro-puncture the blood may be coagulated in the bloodvessels in such a way that there will result a solid fibrinous mass, which adheres to the walls of the vessel, and which completely intercepts the circulation of the blood.

2. At the end of ten, twenty and sometimes thirty minutes, the mass is sufficiently solidified to obstruct the vessel.

3. The same phenomenon occurs in the veins as in the arteries, with this difference, that the solidified mass obtained in the veins is a little less consistent and more deeply colored than that of the arteries.

4. The mass or coagulum which results from the double ligature, and which is found compressed, is less colored than that which is produced by the galvano-puncture.

5. The solid mass comprised between two ligatures and submitted to the electric current during life, presents the same characters as that which is formed between two ligatures without any electrical current; which proves the necessity of leaving the part submitted to the experiment under the influence of the circulation.

6. The blood drawn from the vessels and submitted to the electric current does not coagulate, contrary to the opinion expressed by Dr. Pétrequin.

7. The coagula may be produced without cauterizing the arterial tissue, and without giving rise to any serious disorders in the economy, it being sufficient merely to keep up a constant electric current.

8. The hemorrhage which appears after the extraction of

the needles which have served as the conductors of the electricity, is insignificant and easily arrested by the simple application of cold water.

*New mode of applying electricity.*—Prof. Orioli called the attention of the congress to the happy results obtained by Dr. Cogaina and himself in the following application of electricity: Unite a zinc and silver plate by means of a silver wire. Having now made two little wounds on the portion of the cutaneous surface that you desire to act upon about four lines in diameter, with a view of giving to the skin a better conducting power, which you may do with any epispastic that you deem preferable, and before any other alteration of the skin takes place, applying to the denuded surface the two metallic plates, it will be observed that the one which corresponds to the zinc will enlarge, become more profound and give place to a sort of eschar; assuming first a white and then a black color. Applied in this manner, the apparatus may remain for a number of hours, but not longer than a day or two, for fear of carrying the irritation of the part too far.

The authors see in this procedure a double advantage: 1st. A powerful irritation analogous to that produced by epispastics, and superior to that produced by moxas and other similar means—an irritation by which we may overcome as by enchantment certain very obstinate and rebellious affections. Among other examples, they cite the recovery of a young girl who for five years had been tormented with an almost continual cough. 2d. A very active agent to change the surface of unhealthy ulcers, and an emunctory by which very distressing wounds, that were disposed to become carcinomatous, are perfectly cicatrized.

*Test for water in alcohol.*—In no country are physicians more interested in knowing whether the alcohol they use is free from water than in the United States. There are various methods known to almost every one for ascertaining this, but there seems to me none so simple, and few, I am inclined

to think, which succeed so well as that of M. Casoria, published in the Journal of Medical Chemistry. It is based upon the property possessed by the common hydrated sulphate of copper of losing its color when it becomes dry, and regaining it when again brought in contact with water. Thus, if we place a piece of anhydrous sulphate of copper in a vessel containing the alcohol which it is wished to test, in a short time it becomes blue if the alcohol be mixed with water, whereas if it is absolute the salt will remain white.

*Opium in emphysema.*—M. Louis is in the habit of employing opium in very large doses in the treatment of emphysematous attacks. I use this rather doubtful expression because I would not have you for a moment to suppose, that M. Louis pretends to cure by opium the physical alterations which characterize vesicular emphysema of the lung.

In emphysema, as in the greater part of those affections which offer an intermittent or remittent type, there are two indications for the practitioner to fulfil when called to the bed side of the patient: first, to combat the actual attack, the dyspnœa, the cough, the threatening suffocation of the emphysematous; then the disease itself, of which these phenomena are but the symptoms or consequence. As it is impossible to overcome the material organic lesions in emphysema, it is his duty to direct his efforts towards the palliation of the affection. A short time since there was a well characterized case of emphysema of the lungs in a woman fifty-seven years of age in the wards of M. Louis. There was exaggerated sonorousness of the chest on percussion; almost complete absence of the respiratory murmur; soufflant and sibilant rales. The patient had been exceedingly subject to asthmatic attacks, for which she was in the habit of being bled, although it afforded her no particular relief. M. Louis, without absolutely proscribing bloodletting in such cases, thinks that its employment should be the exception rather than the rule; and contented himself with prescribing the following potion: Gum julep iv ℥, laudanum of Sydenham xx gtt., hydrochlorate of morphia 1-5 gr.

On the next day a notable amelioration was observed in the condition of the patient, and has persisted under the influence of the preparations of opium, which have been continued, though in smaller doses.

M. Louis remarked that this case reminded him of one that he saw some twelve years ago, in which the action of the opium was more rapid than he had ever seen it. He was called one day to a young lady seventeen or eighteen years of age, who was laboring under an attack of suffocation. At first he supposed she had some organic affection of the heart, though percussion and auscultation soon revealed to him the true nature of the disease, which was emphysema. He immediately prescribed for the young patient two grains of opium, and at the end of a couple of hours she was relieved.

*Hydatids of the spinal cord.*—The following case is another added to the very small number on record, of hydatids of the spinal cord. Occurring in one of the wards in which I take one of my private courses on medical diagnosis, and having daily witnessed the train of symptoms to which these morbid products gave rise, besides being present at the autopsy, you will bear with my somewhat detailed account of the case. The patient was a man aged twenty-five years, who exercised the calling of sockmaker. His father died at the advanced age of seventy-four years, after having enjoyed uninterruptedly good health. His mother, whose health is excellent, is in her sixty-third year; she has given birth to thirteen children, five of whom died young, though the patient did not know of what disease; the others are in good health. The health of the patient himself was good during his childhood. In his twelfth year he had an attack of measles, soon after which supervened a blepharitis that exists at this time.

It is now nine years since he came to Paris, and eighteen months since he received a blow on the back, which gave him considerable pain, and produced, he said, a momentary embarrassment of his respiration. The following days he felt a pain in the dorsal region, which at times became very severe, extending



to the chest, where it produced a burning sensation. He now consulted a physician, who found the pain was augmented by pressure on the injured point of the spine, to which he ordered sixteen leeches; after which the pain lost its acuteness, though occasionally a dull, vague pain was felt in the back, especially after fatigue.

Four months ago, having resumed his occupation, the acute pain reappeared at the same spot, and has seemed daily to increase, being occasionally accompanied by a burning sensation in the back, and a feeling of constriction in the walls of the thorax while walking. In a few days he was obliged to relinquish his work and enter a hospital, at which period he suffered a good deal when standing up or lying on either side, though when on his back or when he bent backwards he experienced no pain. At the hospital twenty-five leeches were applied to the dorsal region, and afterwards a blister that was kept open for twelve days, during which time the pain disappeared; but as soon as the blister was allowed to dry up, dull pains supervened in the walls of the chest, which, however, yielded to cups applied to their seat.

After the lapse of twenty-one days, the patient left the hospital, being decidedly relieved, but still feeling the dull pain in the back. This in the course of a couple of weeks again became acute, and, accompanied by the constriction of the chest, reappeared from time to time until the first of January, when he felt his legs become feeble. It seemed to him that he danced while walking. The movements of his legs were not in concert, and he was in continual fear that he should fall on the persons who passed him. Towards the end of January the patient felt a pain in the abdomen as if he had been struck there, from which moment the painful condition of the chest to which I have alluded disappeared; but the disease seemed to fix itself upon the parietes of the abdomen, which became heavy, appearing to the patient as if there was a weight upon it when he was lying down; and this symptom, as well as the feebleness of the legs, gradually augmented, at the same time that the pain in the dorsal region persisted,

In this condition the patient entered the Hôtel Dieu, when the following symptoms were observed: Pain in the dorsal region, which was increased by pressure, commencing at the third dorsal and extending to about the first lumbar vertebra; incomplete paraplegia, the sensibility of the trunk to the base of the chest and of the inferior members being perceptibly diminished; partial retention of both the urine and fæces; pains in the abdomen, occasionally lancinating and darting from one point to another. The abdominal parietes appear to the patient constantly on the stretch and as if weighed down by an insupportable load, a sensation which exists equally on the lower part of the thorax, giving rise to an embarrassment in the respiration appreciable only by the patient. He had not had a passage from his bowels in five days. A purgative draught was administered, which produced an abundant discharge. Appetite good; no fever.

The next day two issues were made with the Vienna paste upon the sides of the spine corresponding to the second dorsal vertebra. The following days the symptoms already mentioned made rapid progress, and on the 20th of February the paraplegia was complete, the sensibility of the teguments of the inferior members and trunk to a level with the ribs being entirely abolished. The five superior ribs acted normally, and the diaphragm elevated the abdominal muscles, but it was quite evident that the seven inferior ribs remained stationary during respiration, a symptom which was manifest to the eye and hand applied to the chest. The retention of the urine has become complete; the same is the case with the fæces. Soon after this period an enormous eschar formed on the sacrum and buttocks, and black spots appeared on the toes and on the surface of the internal malleolus.

In the first days of March an erysipelas, which assumed the form of *erysipelas ambulans*, attacked the face and afterwards extended to the arms and upper part of the chest, accompanied by a well marked febrile movement, and continued till the death of the patient.

The patient had repeated chills during the whole of the

18th, and on the 19th he was troubled by a slight but very frequent cough, followed by expectoration of a frothy serum. His countenance now became notably changed; the chills were repeated during the following days, and death ensued on the night of the 23d.

*Autopsy thirty-six hours after death.*—Marasmus extreme, especially in the inferior extremities. The sacrum and buttocks presented a vast wound resulting from the fall of the eschar previously mentioned. The glutei muscles were partly denuded, and partly covered by dark looking flaps of mortified cellular tissue. The slight projection at the second dorsal vertebra observed during life was still to be seen. The spine being opened as carefully as possible, as soon as the spinous processes and posterior portion of the vertebræ were removed, a mass of hydatids was perceived on a level with the second and third dorsal vertebræ, and presented the following disposition: they were enclosed in a cyst about the volume of a man's fist, of an irregular form, longer transversely than vertically; this cyst had elevated the laminæ of the vertebræ, principally those of the right side, which were very thin and seemed in some points even entirely destroyed. Unfortunately the destruction occasioned by the saw prevented our ascertaining the exact state of these parts. The cyst, after having separated or destroyed the laminæ of the second and third dorsal vertebræ, was prolonged underneath the vertebral muscles and for a short distance under the rhomboid muscle. On the left the cyst had only elevated the vertebral laminæ, but it was not prolonged beneath the muscles. Its anterior wall was applied immediately upon the dura mater, which was unaffected. The cord, although compressed, presented no alteration save a slight sanguineous congestion, both under and about the compressed point. The hydatids were of different sizes, some being as large as a cherry, while others were not larger than a pea. The largest were empty, their parietes torn, opaque and elastic, resembling a thin piece of caoutchouc. The smaller were transparent, and filled with a slightly opaline liquid, which, as well as the hydatid cysts, was examined

with the microscope, though without detecting the presence of any entozoa. Some traces of inflammation of the mucous membrane of the bronchii, a little sero-sanguinolent engorgement of the pulmonary parenchyma, and a slight effusion in the left pleura, were all that was noticeable in the other portions of the body.

*The action of strychnine on the bladder.*—M. Trousseau, in his *Traité de Thérapeutique*, speaking of strychnine, says: “We have not seen any secretion rendered more active by the nux vomica if it be not the urine, and here not only is the secretion more abundant, but the excretion is both more frequent and more energetic, to such a degree that some patients are obliged to urinate every hour.” Trousseau is one of the few writers on medicine who have indicated this predilection, so to speak, of strychnine for the urinary apparatus. Several cases have occurred recently in the wards of M. Vigla, at the Hôtel Dieu, which, while they tend to confirm this opinion, suggest some reflections of the highest practical importance.

The subject of the first case was a man aged forty years, who had been taken five months before, without any known cause, with lassitude and feebleness in the legs, which phenomena gradually became more intense, and ended by constituting a true paralysis of the inferior extremities. He was admitted into the ward, where he was treated at first by revulsions upon the digestive tube, then by strychnine. M. Vigla is accustomed to commence with strychnine in the dose of one-fifth of a grain per diem, given in a gum julep of four ounces. He prefers this mode of administering it both to the endermic method and the form of pills. He has remarked that the effects of the medicine are more rapid and complete when it has been dissolved before reaching the stomach, since this organ thus effects the absorption much more promptly than when both its solution and absorption are required at the same time.

The first effect produced in this case was a more abundant secretion of urine, then frequent desire to micturate, during



which act there was slight scalding; subsequently there were twitchings and pinchings in the legs, and a very marked return of mobility, so that the patient was able to walk without much difficulty. The augmented activity of the bladder, the more remarkable as there existed at the time the patient entered the hospital a commencing paralysis of this organ, continued only for a few days, and has diminished in the ratio with which the strychnic phenomena have manifested themselves in the muscles of the extremities.

The second case relates to a man who has been sick for six months. The affection commenced by constipation, difficulty in defecation, sluggishness of the bladder, pains in the back and legs, the latter growing so weak that on his entry, about four months ago, he was totally unable to walk. The treatment that he had undergone before coming to the hospital consisted in venesection, hip baths, ptisane of cherry stones, wine of cinchona and gentian. When examined for the first time, he had almost complete retention of urine resulting from distension of the muscular fibres of the bladder, which were deprived of their elasticity. Belladonna was first prescribed, then strychnine in the same dose and manner as in the case just related. Here, equally as in the preceding example, the first symptoms produced were manifested in the bladder—frequent disposition to urinate, accompanied by scalding during micturition; convulsive twitchings in the muscles of the legs and thighs. At this period (April) the strength has increased, and the patient has commenced walking with considerable facility, although he still throws one of his legs slightly to one side.

The last case is that of a man who, in September last, was attacked with a myelitis, which became chronic. He entered the hospital on the 20th of February, at which time it was wholly impossible for him to move his legs. He was put upon strychnine, and, as in the two others, he experienced tremblings and twitchings in the legs, and even pretty severe pains; a little increase of activity in the secretion as well as excretion of urine. A varioloid, so light that it did not even suppurate, supervened, and the strychnine was obliged to



be suspended. But, singular to relate, under the influence of the varioloid, at the end of seven or eight days, the paralysis seemed to be modified, and now the subject, lying upon his bed, can move his foot from the horizontal plane which it has occupied, and lift it to some height. The retention of urine has ceased, and there is no longer any difficulty in its expulsion.

Before proceeding to give some other instances of an analogous character, I may submit, that should ulterior and more extensive experiments with strychnine demonstrate that it has an almost specific action upon the muscular fibres of the bladder, we may hope to derive very great advantages from its employment in certain paralyses of this organ, whether they be idiopathic, the result of some mechanical cause, in which case strychnine is the principal element of the treatment; or symptomatic of some other affection, when it would constitute a useful adjuvant to stimulate the inert viscus, while appropriate means were being directed against the causes of the affection.

M. Mauricet has published in the *Archives de Médecine* (t. xiii, page 403) a short history relating to this subject, which, being unusually striking, I translate entire : The two sons of Mr. R., he says, the one 13, the other 14 years of age, both of lymphatic constitution, had labored since their birth under nocturnal incontinence of urine. I prescribed the alcoholic extr. of nux vomica in doses of  $\frac{1}{2}$  gr. morning and evening. Three days elapsed; the incontinence had disappeared and was not again seen during the use of the remedy. At the end of fifteen days, the nux vomica was discontinued; relapse. Consulted again, I made the same prescription; the incontinence again disappeared. The treatment was interrupted; another relapse. Finally, having taken the extract for the third time, and having continued its use during a month, the two patients were completely cured of their disagreeable affection.

M. Mauricet, after observing concerning these facts that they require to be substantiated by new experiments, adds—“ Nevertheless, in considering that the incontinence of urine

has always disappeared under the influence of the strychnia, and that it manifested itself anew at the cessation of the remedy, have we not ground for believing that the nux vomica contributed powerfully to the cure ?”

One more case, and I dismiss the subject: M. Trousseau employed strychnine with the most perfect success in a woman who, in consequence of a fall from a considerable height, had been first paraplegic, and afterwards merely affected with a paralysis of the bladder. The latter affection yielded most promptly to the strychnine.

Since M. Velpeau has not played a conspicuous part in my letters for some time past—owing more than anything else to my having devoted the months of January, February and March especially to the study of medicine—I have concluded to report one of the lectures which he delivered a week or two since, and which I believe will be found to possess all the interest that usually attaches to the clinics of this eminent professor. It is as follows:

*Cancer of the breast.*—A peasant about fifty years old has returned to our service for a cancer of the breast. I say returned, for she had presented herself to us when the tumor was circumscribed, its limits clearly definable, its mobility evident—in a word, when it offered conditions favorable to the operation. But the tumor was the seat of no pain; the patient could not comprehend how a tumor which gave her no trouble was a fit subject for the knife, and, refusing the only efficacious remedy that we could propose, returned to the country. Today she asks for what at that time she could not be prevailed upon to accept; today the tumor is ulcerated, adherent, and extends perhaps to the ribs. This is a trouble that you will often meet with in practice. You will see the operation rejected at the moment when it is opportune, and solicited at a later period, when the progress of the disease has rendered it almost impossible, or at best of doubtful success. And this is particularly the case when the cancer causes no pain, especially as women find physicians who give them counsel more

in accordance with their taste in altogether discountenancing the operation or in postponing its application. This order of physicians may be subdivided into numerous genera. The first are charlatans, whose only end is to inspire the patients with a false security, the consequences of which it is needless to allude to. There are others, and these may perhaps be conscientious, who believe in the medical cure of cancer, at least in certain cases; these essay internal medication before resorting, if it should become necessary, to the removal of the tumor. It is not true that medicine ever made the smallest cancer disappear, and these pretended cures arise from an error in diagnosis. In good practice, he alone attacks cancer by internal remedies who is assured that the nature of the disease is not malignant. And should he have to deal with confirmed cancer, he is in a dangerous path; he loses precious time in dissipating or diminishing the engorgement of the tissues which surround the tumor, while he exercises not the slightest influence on the final result. This method, then, possesses not a single advantage, while it has many attendant evils.

In the first place, that cancer is often primitively a local affection I have not the slightest doubt, although this is a point which, as you know, has been warmly contested. In temporizing, then, or leaving the disease to become general, the cancerous cellule, if it really exist, is transported first into the circulation, afterwards into the other organs, and infection is the result. Granting, even, that the cancerous principle pre-existed in the economy, and that the tumor is but a manifestation of it, in removing this tumor, if you do not destroy the principle, you at least destroy one of its effects, without increasing in any degree the activity of the cancerous diathesis.

On the other hand, as a wound the operation offers no danger if it be made in time, a little while after the appearance of the morbid product—when, for example, its volume does not exceed that of a filbert. In this case you relieve the patient by a small incision scarcely followed by reaction. I should advise you, and this is my practice, to operate as soon as the cancerous character is evident. To wait till the tumor ulcerates and

extends, or even until the ganglia become affected, is to compromise the life of the patient as well as the character of surgery. When the ganglia are only *engorged*, the result is already uncertain, and if you would operate under such circumstances now, you will not do it when you become old. Young practitioners attribute this to the coldness of age, and, full of confidence in the powers of the art the duties of which they are just entering upon, they mistake for timidity what is but the fruit of experience. And after a first and even a second failure, they still repeat their efforts; but finally correcting themselves, they in their turn become old, and no more subject their patients to useless torture.

In the case which occupies us, the tumor is ulcerated, adherent, comprehending perhaps the ribs, and the ganglia in the axilla are enlarged. This lymphatic engorgement, which is nearly always cancerous, would deter me from any operation if the patient, seeing but too clearly the fate that awaits her, had not persuaded me by her repeated and anxious entreaties to give her, uncertain as it is, the sole chance that remains. The condition of the part, and especially its size and depth, forbids removal by the bistoury; caustics are scarcely of easier application, but they disturb the economy less, occasion no fever, and although more painful, are less alarming to the patient. To what caustic should we give the preference—to the paste of chloride of zinc, or that of Vienna, or that of frère Côme? The latter possesses a particular danger, belonging to the poisonous nature of arsenic, which constitutes its base; and although these dangers have been exaggerated, still they are not the less real, as there are instances to prove. And here the size of the absorbing surface augments it in a fearful degree. Besides, this paste produces great pain and high inflammation. That of Vienna produces a sanguineous discharge which fuses it, and its action is too superficial. That of the chloride of zinc attacks only fungous tissues or those deprived of their epidermis; you may hold it a year in your hand without feeling it, but the moment you remove the epidermis by a blister, it will take effect and burn

you violently—a property as true as it is strange. It would be necessary here to denude a part of the tumor, and this initial step is very embarrassing; and let me add that this paste causes cruel suffering during the whole time of its application.

The *black caustic*, composed of sulphuric acid and saffron, without any precise formula, but so as to form a homogeneous paste, appears to me to possess incontestable superiority over all the others. It destroys every surface with which it comes in contact; it occasions no sanguineous discharge even when the skin is ulcerated and fungous; it occasions very little pain; the tissues attacked become dry, and suppuration arrives only with the eliminatory inflammation at the end of fifteen days; and during this time, without any dressing, without any care, the patient may forget his eschar. Added to all the rest, the retraction of the eschar limits the extent of the cicatrix. It is true that its application is somewhat difficult; it adheres more to the spatula than to the tissues. As it burns all, the diachylon cannot circumscribe it; it is not well applied except on a horizontal surface, and it is, moreover, liable to become fused. But these defects, which I am far from endeavoring to conceal, by no means counterbalance its good qualities, and I repeat that the black caustic is, in my opinion, preferable to all the others. I proceed to attack successively the various points of the tumor by partial applications.

In the latter part of March Prof. Velpeau delivered another lecture on the subject of cancer of the breast, which consisted in substance of the following:

The patient on whom we are about to operate is a woman forty years of age, of a dry and nervous temperament. She is affected with a tumor of the right breast, which dates, according to her account, only about four months back, and was caused by a blow with a key. I saw the patient a month after the accident to which she attributes the development of the tumor, and it was apparently about the same volume then as it is now. The nature of this morbid production does not allow of our believing in so rapid a growth. And here I may remark that this is a shoal with which you will often meet in the world.



and which you must learn to avoid. Persons will tell you that a considerable tumor has appeared within a few months, and in some cases even within a few days, when in reality it has existed for years. A great many tumors commence and attain considerable size without having by any pain, by any embarrassment, awakened the attention of the patient. It is especially in the breast, and in those that are voluminous, that this latent state may be developed. The tumor there is lost in the tissue which envelops it, and if it does not deform the organ, it escapes the attention of the patient who does not examine the part. And when from a blow, or violence, or any suffering whatever, this examination is made and the tumor is discovered, by an innate tendency to search for the causes of things, the woman sees in the blow of a key, in the pressure of the whalebone of her corset, little mishaps that are so slight as scarcely to be remembered, the cause of her malady. At other times, it is by chance that the disease is perceived. In the present case the breast was neither voluminous nor deformed, but the deception had another source. Instead of a circumscribed tumor in the mamma, it is the entire gland that is invaded. The breast has not changed either in form or size, but in its consistence and nature; it has hardened and degenerated, and as this transformation has been accomplished without pain, it remained for a long time unknown. We cannot accept the testimony of the patient, for it is scarcely possible that a sanguineous tumor could so promptly have acquired such volume and hardness; and it is evidently of a scirrhus or encephaloid character, the uniform manner in which the entire gland is affected, the inequalities and the consistence of the tumor, removing all doubt in this respect. And what unfortunately still further confirms our diagnosis is the engorgement of the axillary ganglia of the corresponding side, and the history of the family of the patient, her mother having died from cancer of the uterus, and her sister from cancer of the breast.

Whether scirrhus or crude encephaloid, we undoubtedly have to do with a cancer, which we may safely say commenced not less than eighteen months ago. This cancer, of hered-

itary origin, and complicated with engorgement in the ganglia of the axilla, does not afford sufficient prospect of success to propose an operation to the patient. So far from it, indeed, I have only consented to attempt an operation after much entreaty. But this woman having seen her sister die from a mammary cancer which was not operated upon, she has returned so many times to the charge that I am at length overcome. I have been overcome not only by her entreaties, but by a prospect of the danger which I feel menaces her, left to herself—the inflammation of the cancer, the excrescences which are reproduced, the repeated hemorrhages, the incessant sufferings, and, at the end of all that, a cruel death—this more than all else has made me yield. Besides, a relapse does not always occur, and may be very distant.

The disease comprehending all the breast, it is necessary to amputate the whole of the organ. As the tumefaction of the ganglia may be owing to a simple inflammation, we will preserve them for the present, extirpating them at a future period if the engorgement of which they are the seat shows a malignant character. The patient strongly wishes to be etherized, and as there is no reason why she should not be, we will administer the ether.

The patient at first did not breathe the ether well, but she soon commenced inspiring more fully, and at the end of five minutes became insensible. During the operation, which lasted a minute and a half, there was no sign of pain. There did not in fact seem to be any suffering, nor even a dream of it—nothing but insensibility attended by a perfect calm.

Eight days after the operation, Prof. Velpeau returned to the case thus :

The day after the operation, very severe pains, though without fever, declared themselves about the left breast, on the side opposite to the one which had been removed. The woman was not alarmed, because, she said, she was subject to these nervous attacks. The third day this pain had changed its seat to the epigastrium, and had become violent and distressing. There was nothing noticeable on the part of the

wound or elsewhere, except an insignificant erysipelas on the shoulder. I prescribed calmants.

On the fourth day the pains redoubled themselves, extending throughout the abdomen and reaching the base of the chest; smallness of the pulse, attended with violet hue of the face, and threatened asphyxia; followed on the fifth day by death. This event, which was as unexpected and sudden as it was violent, seemed to have its origin in what the ancients called *phrenitis*, that is to say, inflammation of the serous surfaces of the diaphragm; and we shall without doubt find, tomorrow, a peritonitis, perhaps a pleurisy, and possibly also a pericarditis.

The day after the autopsy, the professor expressed himself in these terms:

The idea, the fear that etherization plays some part in the development of such accidents, made it our duty to examine most scrupulously the lungs, although there was scarcely any embarrassment in their functions, and then only in the last moments of life. But the state of the bronchii and of the pulmonary tissue offers, as you see, nothing abnormal. There is only at the base of the two viscera a very ordinary alteration, and, so to speak, of hypostatic engorgement, an engorgement which is not very decided and without induration. You will remark the traces of violent inflammation upon the two diaphragmatic surfaces—of pus and false membranes in the pleura and in the peritoneum. The plastic layers are very thick, particularly on the spleen and liver. This is a result that I have witnessed more than once before the ether was heard of. It is not very rare to see intercurrent phlegmasias, especially pleurisy, manifest themselves after amputation of the breast; and I saw a fatal peritonitis follow the same operation in bed No. 31 of the same ward, seven years ago. The patient died the third day, of the peritonitis.

Men are no more exempt from these complications than women; and what is remarkable, these accidents, instead of waiting until the day after the operation, sometimes appear in the evening of the day on which it is performed. I shall always remember a vigorous young man who came to La Pitié

to be operated upon for a lachrymal fistula, and was carried off by an acute peritonitis. Here we have had a delicate, nervous and susceptible woman operated upon in a badly heated room, having had to traverse cold passages both coming to and going from the amphitheatre. These are the facts: I leave you to judge respecting matters of which you were eyewitnesses.—The tumor was of a fatty texture and extremely hard.

*A case of sarcocele.*—The day subsequent to this, Professor Velpeau operated for sarcocele, and I have thought it worth while to connect two affections so analogous:

The patient is thirty-nine years old, affected with a tumor of the testis. This tumor, which is not of very recent date, is of the volume of my fist, ovoid, regular, indurated, and of the form of a hydrocele, though on examining it with care we soon see that there exists no transparency and no trace of fluctuation, and by pressure we detect a solid elastic body. The tumor is of considerable weight. But you must bear in mind, remarked the professor, that in hydroceles of long standing, the scrotum being thickened, you may observe the greater part of these characters. An explorative puncture gave rise to the discharge of a little blood, and I was able to feel that the point of the trocar was implanted in a body of a concrete nature.

Concrete tumors of the scrotum all bore once the generic name of *sarcocele*, but gradually the application of the word was restricted; scrofulous and fibrous tumors and hypertrophies of the gland were one by one excluded, until today the name of *sarcocele* is applied only to cancer of the testicle. Hypertrophy of the testicle does not acquire the volume of the tumor that we have here; it attacks the two testicles, does not afford so great a density, has a certain softness, and is, moreover, rare in our country. I have observed many cases of it among Brazilians.

The tuberculous testicle rarely possesses this volume; it is unequal, embossed with certain projections, which are soft, painful, and at times contain pus.

Fibrous tumors are rare; nevertheless they are occasionally

met with; they have almost exactly the volume, consistence and march of this. There is no reason except their rareness why we should not suspect one here, though as cancer is much more common, it is natural to apprehend that this is one.

Cancer of the testicle is almost always of complex nature: we find it encephaloid, scirrhus, or colloid. We are not able, then, *a priori*, to determine the nature of the tissue of the tumor; nevertheless everything induces the belief that this is formed of encephaloid tissue. Whatever it may be, the remedy is the same, namely, castration. For the prognosis, it is to be desired that the tumor were of a fibrous nature, for then we should be sure to have no return of the affection.

The patient inspired the ether; and as he feared the pain of the operation, was told that this would be deferred till the next day. At first he respired the ether rather imperfectly, but presently seized the apparatus as you have so often seen persons do when breathing the nitrous oxide, and in the space of three minutes he was pricked without seeming to feel it. At the first stroke of the bistoury he cried out, "Let me alone," and then became a little disturbed. The operation was continued and the tumor dissected; the patient spat, and said, "No danger, no danger." The cord was ligatured *en masse*, and the patient did not utter a single cry or make the slightest motion. During the dressing, gradually returning to himself, he said—"You may operate upon me now; I am sure I shall feel nothing."

*Excision of the tonsils.*—A child being placed upon the table whose tonsils it was necessary to remove, Prof. Velpeau remarked:

I consider the *tonsillitome* preferable to the bistoury, especially at this age. I do not pretend that it should be used in all cases. It is necessary that the tonsil be globular and isolated; if it has a large base, the bistoury will be more convenient, as with that instrument you are able to dissect a little before excising it. Another difficulty presented by the *tonsillitome* is that if, the tonsil being once engaged, the spit should



tear it, you only break the gland. In order to avoid this accident, you must, in depressing the handle of the tonsillitome, bring the amygdala entirely within the ring before driving in the spit. It is because this maneuver is either not understood or neglected, that the operation is so often imperfectly performed. As the volume of hypertrophied amygdalæ is exceedingly variable, you should provide yourselves with at least two tonsillitomes, one for children and the other for adults. If you should, however, have but one, and the ring of this, as in some instances it is, be too large, by placing the anterior segment upon the gland—which, thus retained, will not escape when the blade arrives—you will usually succeed. It has been said that the tonsillitome was invented for the awkward, but this should not be a reproach, for you see there is a proper way to use it. It possesses, moreover, the advantage of rendering the operation more prompt, more certain, and at the same time less painful.

Paris, April 30, 1847.

ART. II.—*Notes on Medical Matters and Medical Men in Paris.* By  
DAVID W. YANDELL, M.D., of Louisville, Ky.

It is my intention, at no very distant day, in a letter on the Physicians and Surgeons of Paris, to go somewhat into detail respecting a few of the most prominent of these, while at the same time I shall pass rapidly in review some of their peculiar doctrines. In this way, I fancy, more successfully than in any other, I shall be able to convey a correct idea, which, I must say, does not exist in the mind of every American physician, concerning the medical luminaries of the French capital. This, however, at another time; in the meanwhile I give you a report of one of the lectures of Prof. Bouillaud, one of the greatest of French physicians. Since it appears to me to be superior to anything I have yet seen on the subject—*Meningitis*—I propose to communicate it in full.

The disease, he remarked, the study of which we enter upon this morning, has been successively termed ataxic fever, brain fever, and arachnitis, but the name which seems to us best to express the characters of the affection is meningitis. True, it does sometimes occur that the arachnoid alone is diseased, its cavity containing serum or pus, or patches of pseudo-membrane of greater or less extent; but independently of these cases being extremely rare, it appears in the greater part of those that have been published, that the inflammation was not confined to the serous membrane. Moreover, the principal, at least, if not the exclusive seat of the inflammation is the cellular tissue underneath the arachnoid, that is to say, the pia mater. The dura mater participates in the inflammatory action only because of its contiguity and of a persistence of that action, it being only after a chronic inflammation that we discover the membrane thickened, degenerated, or covered by cartilaginous or osseous deposits. The

bones of the cranium themselves may undergo alterations under such circumstances.

Meningitis may be general or partial, it being understood that we confine ourselves to cranial meningitis. In this we include that which affects the periphery of the hemispheres or their superior parts; that which affects the base of the brain, and finally, the meningitis which is seated in the ventricles alone. The inflammation may equally affect the periphery of the organ alone or the parietal surface of the meninges. M. Foville has particularly described the latter, which I may remark very rarely exists independently of inflammation of the other portions of the meninges. Its most frequent causes are external violence, as wounds and fractures of the back of the cranium.

*Anatomical characters.*—These do not differ essentially from those of inflammation in other parts of the body, excepting certain peculiarities which are offered by reason of the structure and properties peculiar to the affected tissues.

The first or acute period, betrays itself by a redness which may be immediately carried to so high a degree as to resemble a true sanguine effusion in the substance and on the surface of the tissues; but it is ordinarily more manifest beneath the arachnoid, in the folds of the pia mater. Most frequently, however, both the arachnoid and pia mater are only covered by a simple arborescence, or a more or less abundantly dotted appearance, while they are at the sametime turgescient and more or less tumefied. Nothing more is required than heat and pain to characterize inflammation such as we have described in a pathological point of view, but these are merely physiological phenomena which it is impossible to demonstrate after the death of the patient.

In this state of things the tissues actually lose their cohesion to such a degree that the pia mater and arachnoid, the choroid plexuses, and the membranes of the ventricles become extremely friable, being easily torn under the finger. This is what is designated under the generic name of *ramollissement*, and is entirely analogous, as to its mode of forma-

tion, to the *ramollissement* of the brain and parenchymatous organs.

At this period these membranes are sometimes covered by granulations, which, however, are seen more especially in chronic meningitis, or rather that particular form of the affection called tubercular meningitis. The surfaces of the arachnoid and of the ventricles are moistened and lubricated in the normal state, you are aware, by a serous liquid; but there does not exist, strictly speaking, any serum in their cavities, and when it is found it has been formed during the last moments of life. A secretion should be considered as the result of an inflammation only where the chemical properties of the fluid, serum for instance, are changed. Now, in the majority of cases, we find sometimes the arachnoidian cavity, sometimes that of the ventricles, distended by a considerable quantity of serum, still transparent, though somewhat less so than in the natural state, and a little more thick. Such is the true transition from the moment of the inflammatory state. It is the active dropsies which constitute a state of protophlogosis, if we may so speak, and which only require another degree to be added in order to become a true inflammation. The symptoms of this protophlogosis are in other respects identical with those of inflammation properly so called, which do not differ from the first except in the character of the secretion. Thus, in the one, we see a serous liquid, perhaps a little thickened, filling the ventricular and arachnoid cavities; whilst in the second this liquid is thicker, viscous, opaque, most frequently infiltrated beneath the arachnoid, in the meshes of the pia mater, when it presents itself under the demiconcrete form of gelatin. The arachnoid and the membranes of the ventricles seem to imbibe this liquid, and to owe to this imbibition their thickening and expansion, at the same time their cavities are filled with the liquid, in which case it generally happens that it eventually divides at the surface and cavity of the membranes into two parts, the one fluid and very limpid, the other flocculent, amorphous, and pulpy. Thus, although there is no great difference as to

the mode of formation of these two degrees of the same disease, they are extremely distinct if we view only their anatomical alterations. In fact the one, active dropsy, (protophlogosis) remains stationary and always furnishes an abundant liquid which does not vary, unless a new action, a greater intensity, is superadded which converts it into a true inflammation. This, on the contrary, furnishes a thick milk-like serum, which in the greater number of instances becomes readily converted into pseudo-membranes more or less dense; and these usually become so far organized as to be furrowed with reddish striæ, indicating the formation of new vessels. If the disease, instead of terminating abruptly in death, as most frequently it does, continues beyond three or five weeks, for example, the false membranes are perfectly organized, and make a sort of integral portion of the membranes of the arachnoid and ventricles; the inflammatory movement loses its intensity, the secreted liquid is produced less turbid, less thick, and more limpid; the effusion augments, and to the inflammatory succeeds a simple hypertrophic action, in so much that the secretion, now more abundant, retains all the characters that it had in the first instance.

M. Foville in his article on meningitis has spoken of false membranes lining all the cavity of the arachnoid, and which almost constituted a new cavity. We ourselves examined a very remarkable case of this kind last year. Leaving aside false membranes, it is probable that many cases of hydrocephalus have no other origin than this new cavity. We observe then, as after a dropsy, milky patches very thin and adherent to the internal surface of the serous membranes.

But these things do not always terminate in this way, and to the injection and thickening of the membranes, to the secretion which occurs in the first moments of meningitis, succeeds soon a more or less abundant suppuration. In certain cases we have found the pia mater steeped in a very consistent phlegmonous pus; occasionally both the internal surface of the arachnoid and the ventricles, according as either one or



the other of these parts have been the seat of the inflammation, are thus covered; and it is also frequently found beneath the arachnoid in the meshes of the pia mater, when its position may be exactly ascertained by pressing lightly upon the serous membranes, which will cause it to change its position beneath its envelop, the arachnoid.

Besides these anatomical lesions, there often supervene granulations more or less perfectly organized, true tubercles which occupy either the surface of the arachnoid or the substance of the pia mater itself, though these do not occur in all cases, but particularly, I may say almost exclusively, in lymphatic individuals who present also in the majority of instances tubercular peritonitis, as well as those pericardites and tuberculous pleurisies, that you will meet so often in practice.

We do not partake of the opinions of those writers, and they are many, who contend that these tubercles existed anterior to the inflammation of the meninges, which, in the end, they produce; we think, on the contrary, that they are constantly preceded by the inflammation which produces them, and when once developed, if this inflammation subsides, or is arrested in its march by any circumstance whatever, they (the tubercles) may exist for years without giving rise to any inflammation or producing any further anatomical alterations, just in the same way, for example, that granulations supervene on the valves of the heart in consequence of a violent and neglected endocarditis. Now what is the nature of these granulations, of these tubercles, that authors have but too superficially examined, and that they agree, without knowing why, to regard as a *sui generis* affection, the true generative cause of which they have never seemed to wish to recognize? This is a question which, in a pathological point of view, is as important as it is vast, since it naturally leads us to speak not only of tubercles of the meninges, but of tubercles in general. And the digression which I am about to make will not, I trust, be considered out of place. We do not hesitate to express ourselves on this subject in the most

positive manner. Let those who regard tubercles as something peculiar in their nature, or who do not believe that there exists any relation between inflammation and their production, be offended at our opinion; for us this opinion is not the less demonstrated, and it will certainly be so for all those who observe well. And first we lay down as a fact, that inflammation alone is the producing cause of tuberculous matter, in a word, of tubercles. Let us now add, that it is inflammation of the lymphatic system, of the lymphatic vessels, which determines the secretion, *sui generis*, it is true, which constitutes tuberculous lesions properly so called. The first support of our proposition is furnished by the fact, recognized and admitted on every hand, that of all individuals those among whom the lymphatic system predominates are the most subject to tubercles. Now if it is said that tubercles are a special disease developed idiopathically and primitively, and we are given as proof the transmission from father to son, in a hereditary manner, of the tuberculous diathesis; we reply without fear of being contradicted by sound observation, that it is by no means tubercles that are inherited, but rather the temperament predisposing to the tuberculous affection; the predisposing cause being, *par excellence*, the lymphatic temperament. Every one knows with how few exceptions all temperaments are hereditary. It is the same with tubercles as with inflammatory diseases properly so called, or the different organic diseases which are occasioned by them. These inflammatory diseases belong to sanguineous temperaments every one will allow; and certainly no one would be found bold enough to assert that pneumonia, for example, is a hereditary affection, though the temperament which predisposes to it is hereditary. But before the connexion which existed between chronic organic affections and the acute inflammations which precede them, was known positively as it is to-day, before it was known that these chronic organic maladies, like the anatomical lesions which characterized them, were but the more or less perfectly trans-

formed and organized remains of an acute anterior inflammation; before this epoch, we say, what was the opinion entertained of these very alterations, and only to speak of a single organ, the heart, what was said of the cause of its diseases? Aneurism was regarded as one of the pretended hereditary affections precisely as are tubercles. Yet heirship was not esteemed the sole and only cause capable of engendering them, and the supporters of the doctrines admitted, perhaps compulsively, accidental causes in the same way that those who believe in the hereditary transmission of tubercles are also constrained, in certain cases, to admit that this mysterious germ may be developed spontaneously and accidentally, without knowing how or under what influences; but in the majority of instances under the influence of the lymphatic temperament.

Thus then, an individual with a more or less predominant lymphatic temperament is predisposed to tubercles, and is unfortunately very often attacked without having had tuberculous progenitors. Such in our opinion, is the predisposing cause, *par excellence*, nay, we would say almost the only one, of tuberculous disease.

We draw another support of this opinion from a large class of surgical diseases. Do we not daily see excoriations, wounds, contusions, in a word, traumatic lesions of every kind, followed by a more or less intense inflammation of the lymphatics comprised in the wound or its neighborhood, and by engorgement of the ganglia to which the intersected vessels extend? And when the first period of this adenitis has passed, if it has not been properly treated, the ganglia tuberculize and are transformed into masses of the best characterized tuberculous matter. We remember to have had a most striking example of this transformation in a patient who succumbed to a pleuro-pneumonia and an abundant albuminaria, in whom all the ganglia of the parotid and submaxillary regions formed a tumor almost as resisting as if it had been osseous, while its volume was nearly quadruple the natural size of the ganglia. Being incised it was found to

consist entirely of yellowish masses of a soft granular matter, resembling, save the color, a mixture of plaster previously dissolved in water, and commencing to solidify, studded with large granulations. Some points were completely softened, and yielded under pressure a white yellowish pus, offering the most distinct characters of soft tubercle or, in other words, of tuberculous pus. All the mesenteric ganglia indifferently presented the same degeneration.

If we see then in these external diseases tubercles developed, if we see them engendered by an incontestable inflammation of the ganglia and lymphatic vessels; if, finally, we see this tuberculization arise and progress step by step under our eyes, in the lymphatics of the external organs, we ask if we are not forced by the most pressing analogy and the most rational induction to admit, that it is not produced otherwise in the internal organs? Would that all the inductions that have been and will be made in medicine were as well founded as this; the science would progress much more rapidly; true principles would be much more numerous, and false principles fewer than they are, and an immense number of facts, isolated because they have been imperfectly studied, and badly studied because no one has dared lift the mysterious veil which envelops them, or rather which necessarily enveloped them when science was still in its infancy, would now be assimilated, classified, grouped, united and transformed into general laws. The great error of many persons consists in believing, by an inconceivable tendency to see on every hand mysteries and new prodigies, that nature acts in a thousand different ways, whilst, on the contrary, it is a fact which is confirmed by daily observation, and which you should never lose sight of, that nothing is more constant, more unerringly identical than the march and effects of a disease in the same tissue, in the same organ, or the same system of organs, if the disease, inflammation, for example, be left under the same natural influences to the hands of nature.

Finally, what are tubercles, and what the relation of cause and effect between tubercles and inflammation of the lymphatic vessels? Tuberculous matter is to inflammation of the lymphatic system what false membrane is to inflammation of the sanguineous system. Thus whenever an inflammation becomes general in the sanguine system it produces a peculiar *secretion*, an exudation from the internal membrane of the vessels. It is swept away by the blood in proportion as it is produced, either in part or wholly; and fibrin being added the blood then becomes more glutinous, coagulable, and plastic, as is shown by the buffy coat, which is a true organic germ, a veritable elementary tissue, only requiring to be grafted upon a living organ in order to become endowed with a life of its own.

The same thing, moreover, occurs in a large number of instances when poured out on the surface of the serous membranes, for example, or into the interstices of the cellular tissues by the capillaries, when it assumes the form of false membranes; and then if these are not absorbed by the force of nature alone, or by nature aided by therapeutic agents, they soon commence to become organized in a definite manner, to become vascular and to be transformed into true serous and fibrous membranes, which may themselves be changed at a later period, by virtue of a power of nutrition possessed by them, the mechanism of which escapes us, into cartilaginous, osseous, or osseo-calcareous matter.

You all know that in another degree of inflammation of the circulating system, and especially in local inflammations of this system, obliteration of the vessels is the result, both by the plastic matter exuded and the coagulation of the blood, and the clots are reduced in a short time to true fibrin. These are more or less adherent to the vascular parietes, and are themselves organized in a great number of instances, and as we have before remarked while speaking of false membranes, they occasionally finish by being transformed, and in certain cases by the continuation or the increase of the inflammato-



ry action, and especially in consequence of a phlebitis, they become, like the inflamed cellular tissue, the seat of very frequent suppuration.

Finally, when inflammation reaches the suppurative stage, an exudation, a purulent secretion, is immediately established in the capillary vessels, and we have then primitively these purulent effusions in the serous cavities which are not organizable, but true foreign bodies, which nature constantly endeavors to get rid of by means of absorption or otherwise. All that we have said relative to the products of inflammation of the circulatory system, may be repeated of the products of inflammation of the lymphatic system. Thus a coagulable liquid lymph circulates in the lymphatic vessels, as blood circulates in the blood vessels. Like the latter, the lymphatics, during the first degree of inflammation, especially when adhesive, exude from their internal surfaces a matter organizable like pseudo-membrane, and differing only very slightly from this in its nature, being tuberculous, the germ of tubercle which is identical with the coagulum of lymph. At a more advanced period, this matter becoming agglomerated, may obliterate the lymphatics, become organized and transformed, or suppurate precisely, as the clots of blood which are in their nature identical with the pseudo-membranes secreted by the internal surfaces of the bloodvessels, and which like it (false membrane) may become organized or suppurate.

Finally, suppuration may also be established in the lymphatics in the same manner as in the capillaries, although the product, pus, may be somewhat different.

We are able to say now what these granulations are, these tubercles that are seen on the free surface of the peritoneum, pleura, pericardium, arachnoid, and in the meshes of the serous cellular tissue, as that of the pia mater, in the course of certain inflammations, and always from preference in lymphatic individuals. They are but the product of the exudation of the capillaries which participate in the inflammation, and which are so numerous in the serous membranes and the laminated tissues which line them. They are but the fellow,

the counterpart of the pseudo-membrane of the bloodvessels furnished by the lymphatic vessels. They, as it were, become organized and vascular, and engraft themselves and live in the same manner, and, playing no longer the part of foreign bodies, may sojourn many years without anything revealing their existence. Meanwhile, once organized, they have a separate existence, and live by themselves, on their own proper account.

These products of inflammation may, and too often do, become the seat of new inflammations, under whose influence they may suppurate. Such is tubercular softening in the greater number of instances. Again; these granulations may, like the pseudo-membranes, be transformed into fibrous, cartilaginous, or calcareous matter, in the course of which metamorphoses they may frequently become the cause of new inflammation in the organ which contains them, and as they were deposited by a previous inflammation, new inflammations in which these granulations themselves participate, fall into suppuration, etc.

After this long digression we return to our subject, and terminate our remarks on the anatomical characters of meningitis, concerning which we have little to add. The cerebral substance itself, in the immense majority of cases, participates in the inflammation of the meninges, either through contiguity or the continuity of the vessels. A more or less thick layer of the cortical substance is found more or less congested; sometimes it appears as if soaked in blood, while its consistence is perceptibly diminished, or in a word, it is softened. The white substance is equally congested, and presents when cut an abundantly dotted appearance, but any alteration of its cohesion is much more rarely observed, unless the inflammation had persisted sometime with considerable severity. But when the ventricular membrane is the seat of the disease the subjacent white substances, in the same manner as the gray substance covered by the pia mater, is always extremely congested, and in the majority of cases softened to a certain depth. What we have said of the partici-

pation of the cerebral substance in the inflammation of the meninges, is a fact which we could predict beforehand and without the aid of pathological anatomy; for how can we explain the delirium and the disorders of the intellect more or less profound in cerebral fever, by the existence, simply, of inflammation of the meninges?

*Signs and Symptoms.*—Meningitis, like other inflammations, gives rise to two orders of phenomena, the one being common to all inflammations, the other peculiar or proper to each. The common phenomena, you will readily understand, are denominated heat, redness, swelling, and pain. In the disease which occupies us, it is not possible, as it is in the external inflammations, to detect these phenomena in the diseased organs themselves, but they are translated to the exterior in a perfectly analogous manner. Thus in meningitis the face is animated and red, the eye brilliant and congested, pain often shows itself in a more or less intense general cephalalgia; this, however, is not always the case, for frequently it is localized in one or other portion of the head, it being usually referred by the patients to the forehead. To what is this cephalalgia to be attributed? We are far from saying that in certain cases the inflammation of the meninges is propagated to the substance of the brain, or even that the general congestion of this organ may not be the point of departure, but we are well convinced that in those cases which are most frequent—those where the pain occupies the frontal region—the cause consists either in participation in the inflammation, or the compression of some of the branches of the fifth pair of nerves which are distributed in this portion of the membranes of the brain, and which moreover are eminently sensitive. As to the tumefaction, it cannot be directly proved any more than the redness. The external heat, especially of the head and frontal region, is too evident to need mention here.

The signs proper to the affection are the following:—In the first period there exists a trouble, a disorder, an exaltation of the intellectual and moral faculties, which usually

produces a violent general delirium. Besides this, infants especially are seized with convulsive movements. In certain cases the muscles are in a state of general agitation and trembling; but in other circumstances these symptoms are replaced by rigidity and very great contraction of the muscular system. . Trismus is also very frequently observed, and is a doubly grave symptom, especially when it manifests itself at the onset; first, because it announces a violent and rapid inflammation, not only of the meninges but also of the base of the brain, nervous centres, etc.; and secondly, because it is impossible to administer anything to the patients. At other times, instead of trismus, the jaws are seized with a trembling and very frequent grinding of the teeth. To all these symptoms is added an exaltation, either general or special, of sensibility. This you may easily verify by pinching very slightly or merely touching the patients, who become agitated, endeavor to change their position, and utter plaintive cries.

Concerning special sensibility the pupils are strongly contracted, and when you persist in speaking to the patient he attempts to withdraw himself from the noise which fatigues him, and of which he will often complain. In the second period, to these symptoms of exaltation of the intellectual faculties, of sensibility and of motion, which characterize the first period, soon succeeds a general comatose condition. Then, if the coma is not too intense, by questioning the patient in a very high voice and with a little perseverance, he recovers momentarily from this torpor, replies in a few words, ordinarily incoherent, and immediately relapses into the same state, which if carried very far gives place to what may be termed apparent death of the functions of relation.

The face alternates with redness and pallor; the features are shrunk and contracted, especially among children; in certain subjects the face assumes an idiotic expression; the dorsal decubitus is most common, and the members are usually extended without any movement or any species of contraction; though it occasionally happens that at the beginning of this

period the patients are still bent and drawn upon themselves lying upon the side or back as during the contractions of the first period; but there is no longer any real contraction, and the limbs seem to remain in this state rather because they are incapable of extending themselves than because prevented by contraction. Cephalalgia very probably still persists in a high degree at this period and even until the fatal issue of the disease, as is evinced, among other things, by the patients, notwithstanding their coma, from time to time raising their hands mechanically towards their heads.

In certain subjects the end of the second period is characterized by subsultus tendinum, though this is not a constant phenomenon. The contraction of the pupils is a phenomenon belonging to the first period of meningitis, always coinciding with the exaltation of sensibility and general contraction, and as soon as compression of the nervous centres, or the extensive participation of the brain in the inflammation is manifested by the symptoms characteristic of the second period, somnolency, coma, etc., the pupils tend to dilate more and more. Independently of these symptoms, there are a few which should particularly fix your attention. Generally the pulse is much accelerated in the beginning of meningitis, varying from 96 to 120 and 130, this last figure being very rare; it is full and extremely resisting, except in feeble anemic patients. in whom we have found the pulse, when beating, from 96 to 100, soft, small, and but slightly resisting; it is rarely irregular and intermitting at the beginning, but its tendency is to become more and more rapid, and at the same time that it increases in frequency it becomes irregular and often intermitting. During the second period it most frequently beats from 120 to 130 times and even more, while it is small, filiform in certain cases, and not easily compressible. If in the course of a meningitis a momentary amendment occurs the pulse becomes slower, less irregular and intermittent, and gains in volume and fulness; but if to this calming of the pulse succeeds a slight acceleration, you are authorized to



pronounce a fatal prognosis, and from this moment the pulse, which at the beginning had been slightly accelerated and then somewhat slower, becomes extremely frequent, beating from 130 to 140, and in the last moments even beyond that. Those of you who were here last year had opportunities of observing, in our service, some cases of meningitis which offered very well marked characters. We should not omit saying that when, during the first period of meningitis, the convulsions and the subsultus tendinum are very frequent, in some extremely rare cases it becomes exceedingly difficult to ascertain with precision the state of the pulse. The general temperature is at the same time elevated, and accompanied by moisture or sweat over the surface of the whole body. This phenomenon is almost always present during the period of reaction and exaltation, and in our opinion, those are at fault who have referred to dryness of the skin as a constant symptom in this disease. True, dryness of the skin is remarked in meningitis at the same time that the general temperature is elevated; but it most generally accompanies the second period, and is almost uniformly present in chronic or sub-inflammatory meningitis which progresses slowly. It is also proper to say, that in certain lymphatic subjects, principally children, when that form of meningitis is observed which some pathologists regard as a special disease, that is, tubercular meningitis, the skin is almost constantly very dry, but the temperature is less elevated than in the others.

The breathing, always very frequent, sometimes reaches 28, 36, and even 40 respirations per minute, is sighing principally with children, and in the course of the disease these sighs are changed into true cries, which have been called hydrocephalic cries. This is a symptom which is met with more particularly in those cases of meningitis which are accompanied by considerable effusion of serum in the cavities of the ventricles and meninges, an effusion which shows itself in subjects where tuberculous granulations are developed in the substance of the membranes. Slackening of the res-

piration is equally seen, but it is due in many cases to the partial or general participation of the nervous centres in the inflammation.

The first phenomena manifested on the part of the digestive organs are anorexia, intense thirst in the beginning, coated tongue, and most generally vomiting. But this latter is often a delusive symptom, which you must mistrust, for it may lead you into error if the other symptoms that we have previously mentioned are not well marked, since it is met with in a number of circumstances, and might lead you to mistake a meningitis for a commencing gastric affection, when in fact the stomach was perfectly healthy. These vomitings or efforts to vomit are observed equally in erysipelas, especially of the scalp.

Alvine evacuations do not generally take place with the same facility, but it sometimes happens that they are passed involuntarily during slight convulsions. In the beginning of the disease the patients are occasionally seized with a diarrhea, though this symptom is not among the most frequent. During the second period, or that of coma, collapse, etc., the evacuations are no longer effected, so to speak; the rectum fills, and when it becomes distended the matter escapes involuntarily under the patient.

The urine is scanty, red, acid in the beginning, now and then depositing a brick-dust sediment; and in proportion as the disease draws near a fatal termination it becomes more and more scanty, and being no longer passed voluntarily the bladder becomes fuller and fuller, and the urine only escapes drop by drop. Many patients cannot pass it even in this way; be this as it may, catheterism is urgent in both cases. The urine is then alkaline. In the last stages of the disease the respiration often becomes more and more loud, then stertorous and laborious, when it very frequently happens that the patients suddenly succumb to a true asphyxia. This occurs principally in meningitis of the base. To this, the acute form, succeeds the slow chronic form, and it is in this variety that we see those numerous examples of insanity and

mental alienation, the causes and points of departure of which Foville, Colmiel, and others have so well described. Whenever physical and mental signs, such as those that characterize pneumonia, for example, cannot be obtained, and we are obliged to rely upon functional phenomena in order to support our diagnosis, which is the case in meningitis, differential diagnosis becomes of essential importance. Meningitis evinces itself, it is true, by certain local signs, as by the congested and animated state of the countenance, the engorgement and tearfulness of the eyes, the increased throbbing of the temporal arteries, etc., but as is proved by the numberless errors committed every day, these, in the majority of cases, are not sufficient. For instance, meningitis is often taken for typhoid fever of the ataxic form, and I may remark, in passing, that it is in these cases that some pretend to have seen typhoid fever without lesion of the glands of Peyer, and that some physicians attach only a slight importance to these alterations. Certainly, the ataxic state may be complicated with typhoid fever, but it is nothing more than a pure and simple complication, for these ataxic phenomena in no degree form an integral part of typhoid fever, and even if they did they are wanting in an immense number of instances, and particularly in our wards where the disease is not allowed to continue a sufficient length of time for the nervous centres to feel the influence of the general infection, whatever may be the manner in which this infection has been brought about.

The causes of meningitis are both various and different in their nature. For the sake of better studying them they have been divided into two classes, *predisposing* and *determining* causes. But, although this general division has been received, it was found necessary to make a third group which comprehends the sympathetic or reactional causes; for although these bear a certain analogy to the predisposing causes, the resemblance is not sufficiently close to allow of their being classed with them; while from those styled determining or exciting they differ very widely. Under these

circumstances we feel ourselves authorized to adopt another division, by which the causes of meningitis may be comprised under four heads, and by which the subdivisions may be determined with greater precision. It is this—1st. Direct causes. 2d. Indirect causes; which may be subdivided into 1st, Direct causes: *a.* those which act materially and are common to inflammation in general; *b.* those which are immaterial, if the expression may be allowed, or, in other words, moral or intellectual, affecting specifically the nervous centres and their appendages, which are the organs in question. 2d. Indirect causes: *a.* those which are only predisposing, such as age, sex, temperament, physiological conditions, such as food, drink, etc.; *b.* those operating sympathetically or by reaction, and which comprise certain morbid states, such as typhoid fever, erysipelas of the scalp or of the face, sometimes pneumonia of the summit of the lungs, etc. Let us now enter into details—

1st. *Direct Causes.*—*a.* Those which are material and common to inflammation in general. In this, you remark, we have included all traumatic lesions, such as profound contusions of the cranium, whether occasioning fracture with depression of the skull, or only violent commotion of the brain, wounds resulting from severe operations on the scalp and the like. Under this category also is embraced a too long exposure to the rays of a hot sun. This, it is well known, may occasion erythema or erysipelas, according as the heat has been more or less intense and continued; in the same manner it may determine meningitis, provided the head be sufficiently exposed. *b.* The different organs become inflamed under the influence of causes which act upon them in a specific manner; exciting food taken in large quantities and most of the mineral poisons, produce gastritis; but exposure to cold, pneumonia, rheumatism or coryza, and by the same law, intense moral affections, such as profound grief, extreme joy, prolonged vigils, immoderate mental labor, acting powerfully on the brain, are the most usual causes of

meningitis in adults, and particularly in young adults. It is necessary to remark, however, that in this case the cerebral substance generally participates either primitively or consecutively in the inflammation of its envelops.

2d. *Indirect Causes.*—*a.* Those which are only predisposing. The different periods of life are not liable to meningitis in the same degree. It is met with oftener before the age of ten than from ten to twenty; during the latter period it occurs more frequently than in middle life, and as old age advances it becomes more and more rare. The influence of age then upon the production of this disease is both great and easily proved; whereas in regard to sex the question is more difficult. M. M. Guersant and Foville assert, and they found their opinion on observation, that young girls are more subject to meningitis than boys, and they attribute this to the *serre têtes* commonly worn by young females in France, a species of cap occasioning a continual and considerable circular pressure upon the head.

By tables recently drawn up at the *Hôpital des Enfants*, and published in a special treatise, it appears from the article on meningitis, that girls are much less subject to this disorder than boys. To what are we to attribute these discrepancies? We cannot here enter into details, but will simply say that the question requires further study, and that, even should the opinion of Guersant and Foville prevail, the explanation which they have given cannot be the true one; for how is it possible that a constriction, which at most is not very great, and which is exerted for four, five, or six years, should determine disease at a period when, taking into account the gradual development of the head, the organs must have become in some degree habituated to such compression? It seems much more logical and just to admit the influence of constitution and of temperament,—for it is well known that young girls and even adult females are generally more lymphatico-nervous than males. If we take this side of the question, then, we should say that lymphatic and nervous temperaments are more subject than any others to men-



ingitis. This explains to us on the one hand why it oftenest attacks infancy; and on the other, why that variety called granulous or tuberculous is almost peculiar to this epoch of life. Five children out of six are in fact more lymphatic than nervous, and we have already assumed that tubercular meningitis is the result of inflammation, and inflammation of the lymphatic system. And from these facts our opinion gathers new force and confirmation.

It is constantly observed that certain physiological conditions are real and frequent causes of meningitis. First and second dentition; the first appearance of the menses, or the sudden and complete suppression, in whatever way caused, of this periodical discharge, are each periods marked in numerous instances by the development of meningitis. These are by no means vague hypotheses to be repeated by medical authors merely because advanced by those who have preceded them, while they have had no means of assuring themselves of their truth; but facts, and what is still more weighty, groups of facts, the numerical tables given in special treatises, the exactitude of which we, ourselves, have had repeated opportunities of verifying,—these offer quite sufficient proof.

A highly stimulating diet continued for a length of time, and especially the abuse, sometimes made of spirituous liquors with the view of drowning mental suffering, are also causes, the action of which though less rapid and probably more remote, is not the less positive. You well know that excessive and protracted indulgence in spirituous liquors very commonly produces a variety of this disease, known as *meningite crapuleuse*, or delirium tremens, which is nothing more than a slow and chronic phlegmasia, of which you will always find palpable and material traces after death.

*b. Sympathetic or reactional causes.*—There are many diseases in the course of which meningitis is developed, or which, at least, become complicated by nervous symptoms. It is very often seen to supervene upon erysipelas of the scalp or face, either by sympathy (and here let us remark in passing, that this expression serves but to mask our ignorance of

the real nature and *modus operandi* of such causes) or by the inflammation being propagated to the covering of the brain through the orbital openings, or through the medium of the veins communicating between the scalp and sinuses of the dura mater. M. Foville has observed that it declares itself sympathetically in certain affections of the serous membranes; and he mentions having seen a case of hydrocele, operated for by puncture and injection, followed by inflammation of the synovial sacs, producing ankylosis of the involved articulation, and finally succeeded by all the rational signs of acute meningitis. We ourselves have had more than one example of inflammation of the membranes of the brain occurring as a coincidence of violent acute articular rheumatism. Happily, however, this coincidence is extremely rare. Sympathetic meningitis occurs very often in typhoid fever, not as an element of the latter affection, but as a complication, and it is to this variety that the name of *typhoid fever of the ataxic form* is applied. We here naturally ask whether there exists any mechanism by which it is possible for the affection of the glands of Peyer to react upon the brain and its coverings. We feel unwilling to pronounce too positively on this subject, but of this we are convinced, that a large proportion of the cases of meningitis regarded as typhoid are really idiopathic, and entirely independent of the intestinal lesion, having either preceded, or come on simultaneously with the affection of the glands of Peyer, in either case precisely as though the latter had not existed. However, we do not refuse altogether to admit that there is such a disease as real secondary meningitis, developed during the course and under the influence of typhoid fever; but instead of saying that it is produced by sympathy, by an imponderable cause, inappreciable by any of the senses, is it not more plausible and exact to say, that it is produced by poison, the typhoid element, the septic principle, which, diffused through the blood and the whole economy, acts upon the nervous centres and their appendages as matter acts upon matter? In either case it is very certain that in our service

where this general infection is prevented, the development of the ataxic phenomena of typhoid meningitis is prevented also, so that, in reality, they occur in our wards only as extremely rare exceptions.

The method which we have followed in describing the symptoms of meningitis sufficiently indicates its ordinary course, and we are saved the necessity of discussing this point in a special manner; a word, however, as regards its duration.

When the disease is really idiopathic and violent, it often carries off patients, especially infants, during the first week, at latest before the expiration of the second; and sometimes, so rapid is its progress, it removes the sufferers between the first and fourth days.

Slow nervous fever is but mild sympathetic meningitis, occurring with other affections.

The prognosis is generally grave, and the physician should carefully guard against allowing himself to be deceived by the lucid moments and intervals of calm which frequently occur, but which are so often and so quickly succeeded by renewed and more alarming paroxysms.

We now hasten to an important portion of our subject, namely, the treatment.

*Treatment.*—The treatment which answers best in meningitis is the antiphlogistic. In what manner should it be employed? We are able to affirm to you that the method of copious sanguine depletions is preferable to any other. But you must not believe that you will often obtain happy results from the first bloodletting; it is generally not till after the lapse of two or three days, during which you have insisted upon repeated bleedings, that you will see the disease yield, the delirium diminish, the fever subside, etc. And yet I must tell you, that in this inflammation the most energetic treatment most opportunely applied, is far from being attended by the same pleasing results furnished in phlegmasias of other organs. I would not be far from the truth in saying, that the most judiciously prescribed and vigorously

employed venesections will scarcely effect the cure of half the cases of meningitis which fall into your hands.

Of the thousand other remedies that have been proposed in this disease it is sufficient to remark, that they should not all be discarded; on the contrary, there are a few which may always be advantageously associated with sanguine emissions. Thus, to the best of antiphlogistics, that is to say, to bleeding, leeches, diluent drinks, cold drinks, ice employed internally and as a topical remedy; and to revulsives, those powerful adjuvants to the antiphlogistic treatment properly so called, that is to say, blisters, (camphorated in preference) applied to the inferior extremities or even to the scalp itself, which should be previously shaved,—to all these means, we say, you should add musk, camphor, castor, etc., which, incontestably, in a great number of cases, have produced favorable results. As to opium, or tartrate antimony, or sulphate of quinine, all of which have been used in meningitis, without dwelling here upon their inefficiency, or inconveniences, we will only say that in despair of the case, and in the absence of any good results from your other means, you may try them, provided you administer them with prudence and moderation.

In enumerating the antiphlogistic agents which you may, and which you even must use, we omitted to mention one in every respect worthy of recommendation, the effects of which in a number of cases have been, so to express ourselves, powerful. You need scarcely be told that we allude to cold affusions. They should be frequent, repeated, and carefully and opportunely combined with the means previously enumerated. Guersant and Foville extol these *bains d'affusion* very highly, and make great use of them, but they differ as to the period of the disease when they should be employed. M. Guersant very seldom prescribes them until the accidents of the first period have given place to drowsiness and coma; and we have derived good effects under similar circumstances. M. Foville, on the contrary, thinks that they should be employed as the principal remedy from the

commencement of the disease, bleeding, leeches, and other means being conjoined merely as adjuvants.

But, to close our remarks, meningitis is one of those diseases in the treatment of which you must arm yourself with courage and perseverance, and act with energy. Happy are you when you have time to bring to bear against this disease all the powerful means possessed by the art; for there are cases of meningitis (occurring in children particularly) that may be called frightful: that in the space of twenty-four or thirty-six hours carry off the patients before you have had time to do more than choose your weapons.

At a late meeting of the Academy of Sciences, Dr. Lesauvage presented a memoir entitled "*Physical considerations on Small-pox and its Treatment.*" The author insists principally upon the necessity of resorting in the first moments of the disease to the antiphlogistic method. He reported many cases in which the application of this plan had been followed by complete success while in the same hospital and during the same epidemic, other patients with whom sanguine emissions were not practised died of acute cerebritis. M. Lesauvage is far from considering cauterization of the pustules unimportant; but he believes that this practice, the principal result of which is to prevent the disease from leaving its traces, and which contributes at the same time to moderate the secondary fever, would be, in the majority of cases, insufficient to induce a happy termination. He thinks, moreover, that most frequently the antiphlogistic treatment when employed in time and without timidity, is adequate to prevent the deforming cicatrices which are so often left on the face by variola treated according to the ancient method.

I have more than once alluded to the fact that Dr. Brooks, a young physician from Boston, is here preparing himself for teaching in the United States Veterinary Surgery. He was in Paris prosecuting the study of medicine when he heard, that the Agricultural Society of Massachusetts had offered



four hundred dollars, *per annum*, for two years, to any one who would spend that time in the Veterinary school at Alfort, preparatory to teaching veterinary medicine in Boston. With a commendable zeal he offered himself for the undertaking, and now for twelve months has been most assiduously engaged fitting himself for the duty. The result of this effort, it is hoped, may be the establishment, by the Commonwealth of Massachusetts, of a school of veterinary medicine. The Agricultural Society has been fortunate in securing the services of an individual of the zeal manifested by Dr. Brooks in the enterprise, and who at the same time is possessed of so much talent for carrying it into effect. With my next letter I shall have the pleasure of presenting you with an interesting communication from Dr. B. on the subject.

As medical reform is a subject much talked of in our country, I will report something in my next concerning the medical reform bill which is soon to come up in the French House of Peers. For the present I will not trespass longer upon the patience of your readers.

Paris, May 30th, 1847.

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.* By  
DAVID W. YANDELL, M.D., of Louisville, Ky.

I take great pleasure in transmitting to you the following letter from Dr. Brooks, the young physician whom I have more than once mentioned as being engaged here in the study of Veterinary medicine. I am sure it will be read with interest. The Agricultural Society of Massachusetts is fortunate in having secured the services of an individual capable of devoting himself to the science with so much ardor as Dr. Brooks has manifested in the subject, and every merciful man will respond heartily to the wish so well expressed at the close of his letter, that the profession which holds a re-

spectable position in all other civilized countries may soon find a place among the reputable avocations of our own. It cannot but strike one as strange that the diseases of the horse, an animal so much admired by Americans, and so necessary to the comfort and efficiency of our race, should have been so little studied. The odium which has hitherto been inseparable in our country from the term *horse doctor* will cease when the subject has enlisted such advocates as the author of this letter. I bespeak for it the careful perusal of the readers of the Journal.

*My Dear Yandell:*

The Veterinary Science, after many an age of the most unjust and inconceivable neglect, has at last received from the French Government a large portion of the favor and honor to which it is entitled. Especial colleges have been established at Lyons, Toulouse, and Alfort, in the northern, central, and southern points of the kingdom, whence numbers of intelligent young men, thoroughly grounded in the principles and practice of their profession, and imbued with those sentiments of self-respect and independence which true learning and unquestioned value never fail to impart, are yearly sent forth into society to fulfil, conscientiously, their honorable and important missions.

The "Horse Doctor," in the English sense of the term, has happily ceased to exist,—and if the medicine of man has not as yet extended a cordial hand to her younger sister, it is that *La Vétérinaire* has hardly had time to remove the enormous prejudices which ignorance and habit have accumulated against her, and that a certain feeling of hereditary dislike still lingers between the members of two sister sciences.

But the day is at hand, I hope, when the medicine and surgery of domestic animals shall be united, as in times of old, to that of humanity. The great principles of the healing art never change—their application alone varies. There should be then, but one *type* of medical schools, where the

universal laws of science being imparted to all alike, their various subdivisions may by natural aid be perfected.

*Claude Bourgelat* is a name dear, for a thousand reasons, to the veterinary science. He alone foresaw its future utility and glory—the inestimable advantages which it is destined to render, and now renders, to medicine, agriculture, philanthropy—and only he was gifted with the energy and learning requisite to triumph over the numberless obstacles which obstructed his path. The labors of Bourgelat are almost incredible—naturally fond of the horse, he abandoned for the sake of this noble animal, a career in which he had just made his debut with the greatest credit, and gave himself wholly up to the study of his qualities, mechanism, and diseases. He revised the works of his predecessors, and exposed their many errors, and he has left to posterity some of the most remarkable treatises, upon nearly every branch of veterinary medicine, which have ever appeared. His opinion is still an authority, and even his faults bear the stamp of his honesty and of his genius. The name of *Claude Bourgelat, the Founder of the Veterinary Colleges of France*, is as familiar to the ears of the French students as are their own names, and his writings adorn the shelves of every well selected library.

But I almost forgot that I had promised to give you an account of the Royal College of Alfort. I will henceforth spare you all general reflections, and confine myself to my subject.

*Alfort* is, as you know, a little village situated upon the road to Lyons, about six miles from Paris. The veterinary school, to which it is indebted for its celebrity, contains upon an average some two hundred and fifty students, of whom about seventy-five enter annually, after having been previously subjected to a general, and, I think, insufficient examination. Diplomas authorizing the title of Veterinary Physician, are conferred upon forty-five or fifty; of this number nearly one-half are destined for the army—entering the several cavalry regiments with the title of *Under-Veteri-*

nary-Assistants, and with a rank corresponding to that of quartermaster.\*

The duration of the studies is fixed at four years; examinations taking place at the close of each scholastic year, to decide whether or not the student is fitted to pass into a superior class, and to enter upon its more difficult pursuits. Such as fail to pass a satisfactory examination are obliged to recommence the studies of the year which has elapsed, and those that fail twice in the same examination, † are dismissed as wanting in capacity. As these periodical tests are pretty severe, there is always a certain number of *veterans* (as the backsliders are called) in the inferior classes. A student may thus, *à la rigueur*, be compelled to pass eight consecutive years in the college, and may even then fail to succeed in his final examination, and leave without a diploma.

Chemistry and physics, in their application to veterinary medicine, botany, pharmacy, anatomy, general and special therapeutics, surgery, and *hygiène* are the principal branches of science taught at Alfort.

M. Eugene Renault, the Director of the institution, lectures upon Veterinary Jurisprudence, an intimate knowledge of which is all important to the practitioner.‡

The hospitals are spacious and well ventilated; they are capable of receiving nearly one hundred patients, at the moderate rate of fifty cents a day each for boarding, medical advice and surgical operations being entirely gratuitous.

Operations are performed either in the open air, or in the amphitheatre which is lighted from above, and in other respects adapted to the purpose. Their various stages and the accidents liable to attend them are thus advantageously seen by a large number of students at a time.

Diseases of the feet, as in the vicinity of all large cities,

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\* *Maréchal des logis*.

† Except in rare instances.

‡ I am about to give in a paper intended for a northern Journal, a sketch of the laws now in operation in France touching the question of *soundness*.

are very frequent at Alfort; and I think that—thanks to the admirable skill of M. Henri Bouley\*—their nature and treatment are better understood here than elsewhere.

Each member of the superior classes has a patient entrusted to his care, for which he is held responsible, and for the state of which he is periodically called upon to account. There is a stable especially destined for abandoned and incurable subjects (*chevaux d'expérience*), and within still another, situated at the extremity of the park, are confined glandered horses, and such as are affected with contagious diseases.

Vivisections, on an extensive scale, are performed by the students during the summer months; sixteen horses being sacrificed for this object weekly. Upon each animal are performed the capital and minor operations of veterinary surgery, such as lithotomy, extirpation of the fibro-cartilages of the ears, ligature of the carotid and other arteries, all operations on the feet, venesection in various parts of the body, extraction of the teeth,† etc. Eight students operate in turn upon each subject, when this is practicable; thus, about one hundred operations, of more or less importance, are performed upon each beast; as you may well imagine life rarely lingers to the last. I have no opinion to offer here upon this system, authorised by the French Government, of torturing animals to death, by way of recompense for the services which they may have previously rendered it. The sight is far from being a pleasant one, and its influence upon the minds of the pupils cannot, to say the least, be of a very elevating nature. Are the advantages of the practice sufficient to counterbalance its cruelties? Have we a right to cause one creature to suffer beyond measure, for the benefit of others of its kind—or for our own benefit? The inten-

\* It is to be hoped that this gentleman will ere long publish, what is so much needed, a work upon Practical Veterinary Surgery.

† This cruel operation is not, I believe, enjoined by the regulations, but I have seen students extract molar teeth, *en passant*, for their own satisfaction.



tion of these vivisections is in part to habituate the student to the sight of blood, and to teach him to be ever upon his guard against unexpected efforts of his patient.

The museum contains some very interesting objects, that I have not space here to enumerate. The newly elected Professor of Anatomy, M. Gonbaux, will seize, I am sure, every opportunity of adding to its already valuable collection of anatomical and pathological preparations.

The dormitories are in a separate building, which also contains the refectory and kitchens. Each chamber is occupied by six young men. The bed-steads are of iron, (and here I may venture to suggest that it is to be regretted that their use is not more general with us than it is, as well for public schools as in hospitals). Each of its occupants is in turn bound to wash out and keep clean the common room.

There is a botanical garden attached to the institution, in one portion of which the most useful medical plants are cultivated, and in another, those only which are employed in Veterinary Pharmacy.

The dog-kennels are next to the garden; they are sufficiently extensive and pretty well managed. The patients are kept under shelter during the winter season, and in summer they are chained during the day time to the walls of the yard, where they receive the benefit of the air and sun. Affections of the skin, eyes and ears, tetanus, the distemper and hydrophobia, are among the disorders which I have oftenest observed among the dogs at Alfort. A series of very interesting and curious experiments were instituted last year, with the view of testing the contagion of this latter disease from the dog to other animals. I have seen it repeatedly produced in the horse and the sheep. There are few subjects more important and more interesting than this, and it is probable that we shall have before long from the able pen of M. Renault, the most perfect and learned treatise upon hydrophobia (or better still, *rage*) which has ever yet appeared.

There is always a *pig-stye* to be seen at the college, but it is rarely occupied by the animals for which it is intended.

It is quite deserted at the moment in which I write. No very serious attention is paid to the maladies of the pig, although they are theoretically professed in the course of the session. The last occupants of the sty were of English race crossed with that of China. M. Viborg, the director of the Veterinary College of Copenhagen, has written an excellent treatise upon the diseases of this *edible* animal.

In their first year the students at the College at Alfort, are taught to forge, as also to form and apply shoes of various models to the foot of the horse. The forges are constructed upon simple and effective principles. There are six double furnaces at which the students work two at a time, in alphabetical order.

The dissecting rooms are in recently erected buildings, of which certain portions are yet unfinished. They consist of two spacious halls lighted from either side, and communicating with each other through the cabinet of the professor who, thus, is constantly close at hand with his scalpel and advice. For convenience of transport, the subjects are placed upon solid iron carriages, of a peculiar and convenient form.

The laboratory is to be removed at an early period to a new room expressly arranged for it. Another large building for the storing of fodder is in the course of construction.

A professor of horsemanship was formerly attached to the college, but for some reason or other the study of this accomplishment, so useful, if not essential, to the veterinary physician, above all if he be destined for the army, has been suppressed.

The drawing master has also disappeared. This, too, is to be regretted, for the art of drawing is of inestimable service to the anatomist and pathologist.

In this short letter upon the college of Alfort, I have not pretended to broach any of the numerous questions which at present agitate the veterinary world. I have perhaps written at once too little and too much, but should this superficial review fail to satisfy your interest and curiosity concern-

ing the science, I may attempt, upon some future occasion, to do higher justice to so important a subject.

The Veterinary Colleges of France are the most perfect that exist; let us take them for our model, and seek to emancipate in the new world a noble science, that still struggles for independence and justice in the land of our fathers.

Your friend,

EDWARD BROOKS, Jr.

Alfort, June 8th, 1847.

*Medical Reform in France.*—A most important question, which has for some months past excited a large share of public attention, is the *Medical Reform Bill*, the discussion of which commenced in the Chamber of Peers on the 5th of June. Since any measure calculated to affect the interests of the medical profession in France cannot but be interesting to the profession in the United States, I have thought a brief analysis of the more prominent features of the bill, together with some notice of the existing laws in relation to the practice and teaching of medicine in France, might justly be considered as coming within the province of your correspondent.

Notwithstanding that France may be said to have taken the lead in medical reform for the last ten years, at least, it was not until the *Congrès Médical*, formed of delegates from among the medical practitioners of all parts of the kingdom, which assembled in Paris last November, to the number of about five thousand, that the numerous abuses were made known to the government, and assurances given by the Minister of Public Instruction that he would bring in at the earliest period a bill to relieve the wrongs against which the medical body had so long and perseveringly remonstrated.

Concerning the medical regulations established in March, 1803, to which additions and amendments have been made at different periods, by Royal ordinances and by the Council of Public Instruction, I will endeavor to give the leading points, avoiding, as much as possible, unnecessary details.

The medical body, as now constituted, consists of Doctors in Medicine, and *officiers de Santé*; the former graduates of one of the three universities of Paris, Strasburg, or Montpellier, and entitled to practice in any portion of France, while the latter, an inferior grade, are merely examined by medical juries and can only practice in the department in which this examination was passed.

In order to become a candidate for the former grade, M.D., the person must produce his act of birth; the consent of his father or guardian, if he be under twenty-one years of age; a certificate from a civil authority of good moral character, together with one or two minor requirements; and finally the diploma of Bachelor of Letters and Sciences, though the latter is dispensed with when the aspirant desires merely to become an *officier de Santé*. The period of study for the title of M.D. is four years, during which time the candidates take out sixteen inscriptions, as they are called, which are but certificates of attendance upon the prescribed courses, submit to five examinations, and defend a Thesis, at the cost of one thousand francs, and the price of the diploma being one hundred francs, the combined cost of the whole amounts to eleven hundred francs. The subjects of the examinations may be thus enumerated—

*1st Examination.*—Anatomy and physiology, dissection, the candidate being required to make some designated anatomical preparation in the dissecting rooms in six hours, relative to which he is asked questions.

*2d Examination.*—Internal and external Pathology with operations.

*3d Examination.*—Natural History, Physics, Chemistry, and Pharmacy, the candidate replying demonstratively to the questions addressed to him on chemical substances and medicinal plants.

*4th Examination.*—Medical Jurisprudence, *Materia Medica*, and Therapeutics.

*5th Examination.*—Consists 1st, in a composition in Latin or French upon a medical or surgical question, the subject of which is determined by lot. 2d, in the examination of one

or more patients in some one of the hospitals, after which they deliver their diagnosis and the treatment which they consider should be adopted. The thesis is required after this last examination. The subject is chosen by the candidate.

Thus, you perceive the first, second, and fifth examinations, and the latter part of the fourth, are eminently practical.

The *officiers de Santé*, as I have remarked, are not required to have the diploma of Bachelor of Letters; they undergo three oral examinations, the first, on Anatomy; the second, on the Elements of Medicine; and the third, on Surgery and Pharmacy. *Officiers de Santé* are prohibited from taking the title of doctor; though through a strange oversight in the law, they may with impunity assume the appellation of "*médecin*," given in common to doctors, *officiers de Santé*, and *vétérinaires*. The new bill proposes to remedy this. *Officiers de Santé* are not allowed to perform important surgical operations, except under the superintendence of a doctor of medicine. The penalties which may be at present enforced against persons practicing illegally, are: a fine of from one hundred to one thousand francs against any individual practicing as doctor; and a fine of from twenty-five to five hundred francs against those practicing as *officiers de santé*. In case of a second offence, the fine may be doubled, and the offender imprisoned for a period not exceeding six months.

This is the curriculum of medical studies for these two degrees, and the state of the medical profession under the present system.

In the new bill the leading points relate—

1st. To the two classes of practitioners, doctors of medicine and *officiers de santé*.

2d. To the repression of illegal practice.

3d. To foreign physicians who desire to practice in France.

The bill proposes the suppression of the *officiers de santé*, who are to be replaced by graduates in medicine who, for a fixed salary, are to give gratuitous medical attendance upon the poor. The Congress demanded this clause by an im-



mense majority, and as Count Beugnot styled it in his report, it may be truly said to be '*la disposition capitale de la nouvelle loi.*' Relative to the second point, the illegal practice of medicine, the new law declares that any person practicing the healing art without having graduated in one of the French Faculties, or without a duly legalized authorization from the French Government, shall be liable to imprisonment for a period of not less than six months, and not exceeding two years; for the second, imprisonment, the minimum period of which is two years, and the maximum five years. A clause at first inserted in the bill, but which has been modified by the committee, provided that all medical men, who might incur the slightest punishment of the simple correctional police, should be deprived of their right to practice. This, as you may well suppose, excited almost universal disapprobation, and certainly, knowing as every Frenchman does for how very trivial offences one may be punished by that not always perfectly just tribunal, the correctional police, not without reason. On the third point, namely, the practice of foreign medical men, it is proposed by the new law that no foreign physician shall be authorized to practice in France, unless it shall have been previously decided by the Royal Council of Public Instruction, that his diploma is equivalent, as an attestation of length of studies and respectability of the university which conferred it, to that granted by the French Faculties. Further, the authorization may be restricted to a certain locality, and confined to a limited period, and is always revocable at pleasure. They are amenable in the same extent as French practitioners to the present laws concerning punishments, and will be in the same degree to any that may be hereafter established. Concerning foreigners who desire to take the degree of Doctor of Medicine in the French Faculties, the diploma of Bachelor of Letters of some university, whose degrees are considered equivalent to those of France, is required. And doctors in medicine or surgery, graduates of foreign faculties who desire to obtain the same grade in one of the faculties of

France, of which, as I have before remarked, there are three, are required to undergo all the trials of the *doctorate*, that is to say, the five examinations and the thesis. They must previously address a request to the Minister of Public Instruction in order to obtain the inscriptions, which are allowed in the proportion of two-thirds of the time spent in foreign universities. Thus, to obtain the sixteen inscriptions equivalent to the four years of study necessary for the doctorate, he must show by certificates that he has studied six years in these universities. The price of the diploma is the same as though he were an inhabitant of France, that is one hundred francs.

The Faculties of France may be said to consist 1st, of Professors of the Faculties of Medicine who lecture on the various branches of medical science; 2d, *agrégés* or assistant professors; and 3d, of *professeurs particuliers*, or private medical teachers. Professors, assistant professors, and private teachers are all nominated by *concours*. According to the present system doctors in medicine are allowed to contend for any vacancy that may occur in the professorships, and the consequence is that *concours* are incessantly going on, and the host of competitors is often very disproportioned to the importance of the places sought. Thus, last year, there were two vacancies for the situation of surgeon to the hospitals at Paris. There were thirty-two candidates, and the *concours* lasted five months. The new law proposes to allow only *agrégés* to be eligible.

Notwithstanding the herculean labors of the medical profession of France in the field of pathological anatomy, while they have laid the medical body throughout the world under lasting obligations and given them an enviable and just celebrity, attracting pupils from every quarter of the civilized globe; notwithstanding the magnificent bequest of Dupuytren of \$40,000, for the establishment of a chair of morbid anatomy, a bequest, the spirit of which has been so zealously carried out by the indefatigable and earnest M. Orfila, there is much yet remaining to be done. The new law acting

upon this principle provides for the formation of laboratories, in the faculties and secondary schools, where the student will be forced, by frequent *post-mortem* examinations, to acquire that knowledge of organic lesions which is now deemed so essential a part of the education of the intelligent and accomplished physician.

I append an account of medical education in Great Britain which I met with in a late English Journal, and during my tour through Germany shall endeavor to afford a similar notice of the profession in that country, thus furnishing to the readers of the Journal an outline of the laws regulating medicine in the three nations in which it has received its highest cultivation.

"In Great Britain, the degrees granted to entitle persons to practice medicine are those of doctor of medicine and of licentiate of the college of surgeons; the latter, indeed, should, strictly, only confer the privilege of practicing surgery; but in England, especially, we find a numerous body of practitioners, who have no *medical* degree, yet practice every branch of the profession. The degree of doctor of medicine is conferred in England, by the Universities of Oxford, Cambridge, and London; in Scotland, by those of Edinburgh, Glasgow, St. Andrew's, and Aberdeen; in Ireland, by the University of Dublin, and by the College of Physicians. The surgical degree is conferred by the college of surgeons in London, Dublin, Edinburgh, and Glasgow. The medical practitioners thus constituted are of four classes—pure physicians, pure surgeons, (these two are common to the three kingdoms); physicians who are also surgeons (peculiar to Scotland and Ireland); and general practitioners, a class peculiar to England, who only take out the degree of surgeon, and become members of the Apothecaries' Hall in London. They engage in the practice both of medicine and surgery, and in addition dispense their own medicines. They constitute by far the largest medical body in the United Kingdom, and have of late years formed a powerful association, the object of which is to obtain from government the privilege of founding a college where degrees will be conferred. This was chiefly brought about by the partiality exhibited by the college of surgeons in its nomination of fellows,

the practitioners being in a great measure excluded. Persons not legally qualified to practice are subject to prosecution by the various colleges; the President of the College of Physicians in London having the power of issuing his warrant to bring before him any person illegally practicing within his jurisdiction.

“The schools of *medical instruction* in the three kingdoms are of two kinds—Universities and Colleges, established by royal charter, the professors in which are elected by the General Council; and, secondly, private schools, self-constituted, with self-elected professors. Here we may at once perceive a grave defect, in the permitting men unknown, untried, to instruct others, when they themselves may be grossly ignorant. Thus young men are, perhaps, for years learning what they will have to forget and unlearn afterwards; whilst, should they have not sense to discern, or energy to commence anew, they are thrown upon the public, imbued with false ideas, skilled in *deadly* practice. Such evils, if not entirely prevented, are at least in a great measure avoided where professors are chosen by a public body, the reputation and standing of that body depending to a certain degree on the character and acquirements of the professors it selects; its pupils being drawn to it by their confidence in such selection; whilst the private schools being in many instances but joint-stock associations for putting money into the pockets of self-created teachers, are flocked to by students, as places where they may take out the necessary certificates in the easiest, and cheapest manner. For, strange to say, the prices of the various lectures, as well as the length of time required to be spent in professional study, vary in these different establishments; thus we may at any moment see, in the London newspapers, advertisements from different schools and hospitals, literally underselling each other. Certain Universities, as those of Dublin, Edinburgh, Oxford, and Cambridge, will not receive the certificates of lecturers teaching in Colleges of Surgeons, even when teaching surgery; whilst, on the other hand, the College of Surgeons in Dublin retaliates, by refusing the certificates of lecturers in these Universities; though it frequently occurs that the very same individual, who is one year professor at the College of Surgeons, is the next seated in the Academic chair of the University. Again, the Universities of Dublin, Oxford, and Cambridge will only confer the degree of Doctor of Medicine on persons having graduated in Arts, and then



only in about nine years after first entering the University; whilst the Scotch Universities and the Colleges of Surgeons give their degrees without requiring any such graduation in Arts, some after three, some after four, some after five years of study. Yet, with such a difference in the length of time in the course of study required, the general privileges and the titles conferred are the same. Here again, however, a strange anomaly appears; for in certain cities there are privileged bodies, whose members alone are by law entitled to practice in those cities, or within a certain limit of their boundaries. Thus, though the London University confers the degree of Doctor of Medicine, and such Doctor of Medicine is considered fully competent to practice his profession generally throughout the United Kingdom; yet, he dare not, *legally*, practice in London, or within a range of seven miles. Doctors of Medicine of the Scotch Universities, again, are not by law entitled to practice in England, nor in Dublin, except they have the license of the Dublin College of Physicians. And what is the necessary consequence of all this want of uniformity in the regulation of medical practice? Why, that the difficulties thus thrown in the way of recognising who has, and who has not, a right legally to exercise his profession, afford a fair field, and open a broad gate to gross humbug and impudent quackery. And so we find, that in no one country on the surface of the globe has quackery ever reached to such a height, or humbug elevated itself on so lofty a pinnacle, as in England. It matters not of what kind, or what description, so it be but quackery. St. John Long with his liniment—Animal Magnetism, with its somnambulists—Homœopathy, with its millionth-fraction doses—Hydropathy, with its water and its blankets—Holloway, with his ointment—all! all alike have gulled, alike have robbed, alike have killed the British public. Why, it has been calculated, from undeniable statistics, that the Battle of Waterloo was fatal to far fewer numbers than the pills of one advertisement of a celebrated quack within a short period of years. Yes, in England quackery sits enthroned on a hecatomb of fated dupes, because the English Legislature will not interfere, and, by equalizing instruction, and conferring similar rights on similarly educated men, cause the public to rely on their skill, and place confidence in their attainments. Science itself is depreciated, and men of science inevitably lowered in public estimation, in any country where the pretender is permitted to enjoy the same privileges and



rights as the true man; whilst protracted misery, incurable disease, and agonizing death must fall to the lot of thousands thus allowed by a careless Legislature to be yearly sacrificed to ignorance and quackery."

Your readers know the celebrity of Ricord as a writer on venereal diseases. I translate the following case from his work just published on that subject:

*Case of Syphilis.* R. J., 31 years of age, born in Ireland, was admitted into the hospital *Du Midi* on the 23d of June, 1846. He was born of healthy parents and possessed a good constitution, of lymphatic temperament. He had had in infancy a slight attack of small pox.

He contracted, nine years ago, a gonorrhea, and at the same time a chancre upon the glans penis, which was soon accompanied by two bubos. The bubos took on an acute inflammation, *suppurated*, and having been opened by the aid of a bistoury, remained unhealed for more than a month afterwards. The chancre was not cicatrized until the end of four months. During the whole of these accidents an energetic mercurial treatment was practiced, which caused a severe ptyalism. No other symptom supervened, and his health remained perfect during the four following years. At this period, R\*\*\*, who had still continued to see women, observed a new swelling in one of the inguinal regions without other antecedent; the swelling was of an indolent character; little inflammation or pain existed; nevertheless it attained considerable size, and terminated in suppuration. Seven weeks expired after the spontaneous opening of this bubo before it healed. This time no specific treatment was employed, and for three years no accident supervened. Two years since, a few days after connection with a public woman, the patient perceived a little excoriation in the fossæ of the glans penis; this excoriation suppurated slightly and was accompanied by very little itching. It soon presented a rounded appearance; its surface was of a grey color, and its base, which had gradually attained the size of the little finger nail, became prominent and excessively hard. Scarcely fif-

teen days had elapsed since the commencement of this indolent ulceration, when already several glands of both the inguinal regions became swollen, though the tumefaction was not very great, and was unattended by any pain. The patient was submitted to a pretty energetic mercurial treatment for four months, at the same time he took bitter infusions and put himself upon a severe regimen. The chancre healed slowly, and the swellings in the inguinal regions disappeared *without suppurating*. Notwithstanding the mercurial treatment, however, ill defined pains came on during the third month, in the neighborhood of the great articulations, with a supra-orbital headache at night, both of which disappeared at the end of a month,—the patient was thought cured and the use of mercurials was suspended. Eight months later, however, some ulcerations appeared on the tonsils, the posterior cervical glands became swollen, and there was some difficulty in the movements of the neck. It was deemed necessary to have recourse again to mercurials, and continue their use for nearly three months, when the cure was considered radical and their employment relinquished.

Six months since the patient noticed upon his legs little spots of a dull red color, unaccompanied with pain or itching. These spots were succeeded by little suppurating pimples which gradually increased in size, became more and more purulent, and finally terminated in a scab. This scab at first of little extent, slowly increased in size by its circumference, while in proportion its centre became convex. At its points, when the increase was still going on, an areola of a claret red, at the same time surrounded and preceded each new zone of the epidermis, which the more recent suppuration had elevated, and which, drying in its turn, served to extend still further and further the base of the scab. This, after being detached, gave vent to a thin, reddish, sanguinolent pus. In the points where the eruption had ceased to make further progress, the scabs, at first of a yellowish, then of a brownish green, became black; they

were hard like horn, giving upon percussion a dry sound; presenting no longer the appearance of an areola, but were surrounded by a narrow circle where the epidermis was in a state of degeneration. Finally, the eruption was limited to the lower limbs, where there were four scabs upon the right and one upon the left. Besides, upon the right, the elementary point of departure was still to be seen what consisted only in a vesicular elevation of the epidermis, with an extensive areola of a dull red color. This form of eruption which always commences with a small vesicle and not by a bulla, can be arrested at this period, or it may pass through a succession of developments which class it often with *ecthyma*, before arriving at those proportions to which the epithet of *rupia* can be applied. However this may be, after the fall of the scabs which had been hastened by the application of poultices, beneath the one which occupied the region below the pátella an irregular ulcerating surface was observed, which from its appearance indicated that it had served as the base to a cluster of eruptions. A part of its surface was already cicatrized. In other points the ulcerations being united, of an irregular round form, presented jagged inverted edges, while their bases, of a brownish green color, were covered with a pultaceous matter similar to that observed in primitive accidents. The scabby crust upon the anterior part of the leg concealed a surface of vermilion red, which was formed of fleshy granulations of a healthy character, somewhat elevated above the level of the neighboring parts. In other places, the crusts or scabs concealed only radiated cicatrices of a brown color, already somewhat contracted and presenting a vascular arborescence. The eruption which dated now six months, was not the seat of any itching, and only became painful when the patient was standing or walking, which caused the scab to crack, which was followed by suppuration and sometimes bleeding. Six weeks before the entry of the patient into the hospital, and a few days after his last sexual connection, an ulceration which attacked a part of the glans was developed upon the semi-mu-

cous reflection of the prepuce. This ulceration assumed the pultaceous phagadenic form.

The treatment consisted in the use of a decoction of *quassia amara* sweetened with the syrup of gentian, and during the first eight days a pill composed of one grain of the protoiodide of mercury and three grains of the iodide of potassium; eight days after the dose was increased to two pills, then three, then four, each at intervals of eight days. The iodide of potassium was given in the dose of three grammes (about 32 gr.14) during the whole course of the treatment. After the crusts became detached the ulcerations were dressed with a solution of the tincture of iodine (2 grammes of the tincture of iodine to a hundred grammes of distilled water, with a sufficient quantity of the iodide of potassium to dissolve the iodine).

After six weeks of treatment the ulceration upon the penis was healed, but it was not until the end of the fourth month that the legs were entirely so. Six months later the cicatrices were still a little bluish at their centres, of a dull white at their circumference, and presented a radiated honey-comb appearance. They resembled the scars produced by burns.

The case that we have just presented to the reader, is interesting under more than one point of view, and constitutes in itself one of those cases which illustrate the whole doctrine. The patient contracts, in the first instance, a gonorrhea, a chancre and some bubos; he detects no *induration* of the base of the chancre; the bubos *suppurate*; no constitutional symptoms supervene; it is true a mercurial treatment was pursued, but we shall see further on if it is to this circumstance that the absence of all consecutive symptoms should be attributed. A long time after this first affection, and a few days after suspicious sexual intercourse, a bubo makes its appearance, a bubo without *any other antecedent*, and which the supporters of the doctrine that bubos may exist as primary symptoms should class in this category. The swelling of the glands—of which the course has evidently

been that of a subacute strumous inflammation or of a sympathetic idiopathic glandular affection, suppurates,—no specific treatment is employed, and no secondary accidents occur. Finally, a new ulceration of the genital organs follows another intercourse, which according to the patient's account becomes extremely hard. The swelling of the glands which accompanies it does not become voluminous, remains indolent, and does not suppurate. The mercurial treatment is begun afresh, and like the first lasts four months, but nevertheless does not prevent the successive evolution of constitutional symptoms for the reason that it is inefficient. After the last intercourse a new ulceration appears upon the penis—now that the syphilitic diathesis is already formed; it takes on the *phagadenic form*, the patient having lost his predisposition to contract an indurated chancre. This is what we witness every day when we observe well, when we rigorously follow the chain of symptoms and the connection of cause and effect. Let us learn then to appreciate the nature of these manifestations. Let the physician who collects cases for the benefit of science take the trouble to write their history himself. Let him sketch the features of the disease and give its diagnosis without permitting himself to be deceived by the prejudices or ignorance of the patient. Then when the diagnosis has been accurate, when account has been taken of all the causes of error that we have pointed out elsewhere, we can affirm that no constitutional symptoms will follow as a sequel to a non-indurated chancre with a suppurating bubo. The diathesis does not become established, and consequently a mercurial treatment, to which we might be disposed to attribute the honor of the cure, is not only useless but may be injurious, may impair the constitution and tend to render, as the foregoing case seems to prove, the ulterior accidents more serious. We can also rest assured that an inflammation of the glands which does not depend upon indurated chancre will not (whatever may be the treatment) be followed by a constitutional infection. But we can affirm that when a chancre presents the specific induration,



when the swellings of the neighboring glands remain indolent and do not suppurate, that the diathesis is established; that in a given time and within certain determinate limits the appearance of constitutional symptoms will be inevitable; that the mercurial treatment given at the proper time, form, and dose, may, perhaps, entirely prevent their appearance or only retard or arrest it in some of its manifestations, as the present case exemplifies.

Finally, when the diathesis is established it does not appear more disposed to multiply itself than other diatheses; if the patient contracts new primitive symptoms these remain local and, as a proof this disposition, they no longer become indurated. But on the contrary, if the constitution has been a long time under the influence of the sympathetic diathesis, which has not been subjected to a methodical treatment, or if a bad treatment, or especially a mercurial treatment has impaired the constitution, then the primitive symptoms have a great tendency to take on a severe type, and often one of the varieties of the phagadenic form.

The surgeon of *La Pitié* is no more! The iron-framed, the strong-minded, the fearless Lisfranc is gone. Whatever may have been the opinions of his professional associates respecting his heart, no one can deny that he has left ineffaceable marks of his intellect upon the vast fields in which he labored; and although but few of them followed his remains to their final resting place, the time will come when, viewing his career with less of prejudice and animosity, all will pronounce upon him a fair and just judgment and number him among the "law givers" of medicine.

Jacques Lisfranc was born in the department of Loire in the year 1789. Commencing his studies at Lyons, he received the degree of Doctor of Medicine in Paris in 1812. He entered the campaign of Dresden as assistant physician to one of the divisions of the army, and was honorably noticed by its great commander. Upon his return he filled the position of assistant physician at *Hôtel Dieu* in Paris. In

1813 he entered with success the concours for the *bureau central*; in 1823 he was equally successful in his contest for the assistant professorship in the faculty; in the following year he was appointed second surgeon to *La Pitié* hospital, and almost immediately afterwards, Bécлар dying, he became first surgeon.

It was here, and dating from this period, that he began to make his investigations concerning the diseases of the genital organs of the female, and it was also about this time that he turned his mind to operative medicine, for which he has since done so much.

The mind of Lisfranc cannot be said to have been a quick or brilliant one, but it was patient, acute, and laborious, a mind for analysis and minute investigation, that, imbued with a sound erudition, moved with regular and collected steps. Hence the vigor and perspicuity with which he describes his operations. Hence the value of his clinical lectures, and it is on this account, as much as on any other, that the medical world has reason to deplore that death did not spare him until at least he could have completed the two works on which he was engaged, *Médecine Opératoire*, and *Clinique de l'hôpital de la Pitié*. Few writers have published more extensively than Lisfranc. Commencing with his inaugural thesis, he has continued, in the midst of his onerous hospital duties, to which he attended with a conscientiousness well worthy of imitation, and in the midst of one of the largest private practices in Paris, to bring forth memoir upon memoir with a rapidity truly surprising. The works upon which he was laboring at the time of his death were meant by him to be his most important, and his chief regret seemed to be that he could not live to complete them. Since his inaugural thesis, which he published in 1813, he has given to the world memoirs on the following subjects, besides others that I shall not stop to enumerate: Upon the amputation of the arm at the shoulder joint; upon the amputation of the foot at the tarso-metatarsal articulation (1815); upon a new method of operating for stone in the female; new methods and processes

in amputating at the scapulo-humeral and coxo-femoral articulations (1823); upon the employment of the chloro-oxide of sodium and calcium in the treatment of simple ulcers; upon amputations practiced upon the lardaceous and non-scirrhous tumors; upon lachrymal tumors and fistula cured without operation (1826); upon white swelling of the articulations; upon scirrhus; upon the general rules for disarticulations; upon compression employed to reduce indurations.

As a teacher Lisfranc was much admired, and his clinics were attended by crowds of pupils anxious to listen to his clear, practical instructions, and witness the operations in which he exhibited so much skill. His personal appearance aided in raising him to an eminence which his superior intellect enabled him to maintain. He was lofty in stature, of a stately gait, and robust form; his features though large were regular, and his deep-set, restless, penetrating eye, expansive forehead, and pale, anxious, thoughtful expression, gave to him an appearance in which the beholder was at once interested. His temper was an unhappy one, owing in part, it is said, to disappointment, and this infirmity kept him in incessant feuds with his professional brethren.

During the life time of Dupuytren he was the object of Lisfranc's peculiar hatred, and after the death of that great rival, Velpeau became the subject of his bitter invectives. In the midst of one of his most interesting lectures, without any apparent provocation, not unfrequently he would pause, drop his subject, and pour forth a furious philippic against some colleague whose doctrines or behavior had excited his displeasure. It is not to be denied that his manner to his patients was also harsh and impatient, and that in his morning visits he sometimes gave himself up to sudden transports of anger. Pupils, hospital physicians and patients were alike required to yield perfect and entire submission, not only to his opinions, but his whims and caprices, any departure being visited, instantly and in public, by sharp rebuke garnished with curses. Still, Lisfranc was possessed of generous qualities of the heart for which he has not had

credit. He was capable of magnanimity towards his rivals and revilers, as the following anecdote will testify. One of these, who had been exceedingly bitter against him about the time that he promulgated the idea of amputating the neck of the uterus, became a candidate for a vacancy in the Royal Academy of Medicine. Lisfranc was the first to second his claims and to press his merits upon the attention of the members. By his vote and his influence the candidate was raised to the eminence he coveted. When some one afterwards expressed to Lisfranc surprise that he should have aided one known to be so much his enemy, he replied that "where talent and science were concerned he always voted with his head, never with his heart."

Instances of this kind are not rare in Lisfranc's history, and although in the course of his long, eventful life he made many bitter enemies, he has left behind him many true friends. His purse and his professional services were ever subject to the calls of charity, and in his death many a poor family has lost a stay and support, a kind and ready benefactor. The church on the day of his burial was filled with the poor to whom he had rendered services, and many were the tears that trickled down the tanned faces of the laboring men as they took their places in that long funeral procession. ¶ He died of pseudo-membranous croup, after four weeks of suffering. He requested that tracheotomy might be performed, but the operation was declined, as false membranes were already formed in the pharynx, œsophagus, larynx, bronchi, &c.

In the course of the few short months of this year how many lights have gone out in our profession! Warner, Revere, McClellan, Wagner, Ramsbotham, Lisfranc—"how fast has brother followed brother from sunshine to the sunless land!" Peace to their manes, honor to their dust!

Paris, June 30th, 1847.

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.* By  
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At the time of writing my communication on Etherization applied to allay pain in surgical operations, I promised another upon its application to midwifery. At that period but few experiments had been made, and no entirely satisfactory results had been obtained; for notwithstanding the marvelous achievements of ether had astonished the world, and inspired on all sides the most pleasing anticipations of advantages still to be realized from it, there seemed a moment when the minds of the most adventurous and eminent practitioners—of those, even, who had witnessed the triumphs of this agent in allaying, what may be termed *pathological pain*, were obliged to pause after the idea had been conceived of applying the powers of ether, no more to morbid cases, but to one of nature's most noble processes, that of parturition, from which



pain, but in the *physiological* sense, is known to be inseparable. Analogy was questioned: Was pain not always pain whenever it caused the human frame to shudder or cry for relief? Curiosity urged—was the domain of this marvelous vapor to be limited to the surgical art so far only as the ablation of limbs and the division of living tissues were concerned? Reason demanded—would the antidote so signally successful against pain when produced by the bistoury, fall powerless when opposed to the pain concomitant upon the performance of certain duties of nature? The solemn laws of the healing art, and the philosophical precepts of physiology, both tended to make those who had been the most enthusiastic in regard to the conquest already gained, pause, and consider the justifiableness of the one they were about to attempt. Things could not long remain thus. Fortunate and daring leaders were upon the bank; the dangerous stream glided peacefully by; they plunged in, and obstetricians have perhaps advanced farther towards the source of nature's mysterious action than their surgical brethren have been called to do, in as much as, in the question of etherial inhalation, the former have not had to interfere with the diseased economy, like the latter, but with a physiological phenomenon at the highest degree of action. And to the honor of obstetricians be it said, they have acted with the most praiseworthy reserve, and with a due reverence for nature whenever they have employed this agent during parturition. Indeed it is to the prudent investigations of the delicate question in hand,—the intervention of an agent abolishing pain in labor, that we are indebted for, we may say, the first regular system of well planned and well conducted experiments on etherization. Enthusiasm and confidence reigned supreme at first. When nature became more deeply involved by the attempts made to modify her ways, cool reason, prompted sometimes perhaps by a growing timidity, assisted to temper this interest, to awaken a calmer spirit of inquiry, and compel a more rigid and safe method of research. Theory and practice have both obtained a certain degree of advancement and certitude in the conflict. The phenomena

displayed during the parturition of etherized women have elicited interesting questions relative to the action of the cerebro-spinal ganglionic system; it now remains with the physiologists to pursue their researches in that direction. Pain has been abolished for a certain period of labor, without any apparent disturbance having arisen throughout nature's course. These practical facts have been principally illustrated by the elaborate and truly scientific communication to the Academy of Medicine of Paris, by Prof. Paul Dubois, and by the notes published by Prof. Simpson, of Edinburgh. New facts have since then been contributed by other accoucheurs in France, whose observations we shall relate in the order in which they have appeared, thereby, possibly, accomplishing in as succinct a way as any other the object of this paper, which is to give the American reader an idea of the actual state of etherization applied to midwifery in this country. I shall begin, after a few preliminary remarks, by a detailed account of Baron Dubois' communication to the Academy, since it continues to be the principal scientific document on the subject before us.

For this account, as well as for most of the facts contained in this paper, I am indebted to my friend, Dr. Charles J. E. Campbell, who is already favorably known to the profession both in England and Paris as a promising young accoucheur. I cannot adequately express my thanks to him for the kindness which he has displayed in placing his note-book at my disposal. These notes were taken at the sitting of the Academy of Medicine, and were further extended at Prof. Dubois' lecture upon the inhalation of ether.

The two noted champions of obstetric science in Paris and Edinburgh, Prof. Dubois and Prof. Simpson, proceeded about the same time, but on very different plans, to observe the phenomena offered by ether administered during parturition. Prof. Simpson presented to the profession certain facts relative to etherization, as they occurred to him in his practice, while Prof. Dubois established at the Maternité, and at the Hôpital des Cliniques, a series of experiments, with the preconceived

intention of ascertaining the exact value of the method when employed in those special cases; the one, therefore, purposing, by some cursory observations, to throw out to the world the assurance of the applicability of the method; the other evidently determined to analyze the character, value, and bearing of the process when adapted to midwifery practice. In this procedure of the veteran French obstetrician, we have another evidence of the sagacious and philosophical spirit which forms the distinguishing trait of the Professor of obstetrics at the Maternité of Paris.

Baron Dubois, as expressed by himself in his communication to the Academy of Medicine, on the 23d of February last, felt greatly embarrassed when he began his investigations concerning etherial inhalation in parturient women. Up to the period we have just stated, there existed but few allusions to the matter, and but three instances were known in which ether had been employed in the practice of midwifery. Dr. Bouvier, in the Academy of Medicine, and M. Velpeau, at the Academy of Sciences, while speaking of the influence of this agent in medical and surgical cases, had merely expressed the opinion that it was not improbable, that the use of ether would be found efficient in certain cases of the obstetric art. The surgeon of La Charité had so far extended his views on this point as to say that, independently of the well known advantage of preventing pain, the agent might probably possess the power of diminishing certain muscular resistances in difficult labors, such as that of the contracted uterus in cases where turning the child became necessary. There is one case known, recorded by Prof. Stoltz, which proves, as far as one case can prove it, that this anticipation is not as yet realized.

As to the three facts to which I have adverted as existing at the time when Baron Dubois began his inquiries, the first, constituting a kind of transition from surgical operations to those necessitated by difficult labor, is one in which the cæsarian section was performed by Dr. Skey, of Bartholomew's Hospital, in London, on the 23d of January, and which was

but imperfectly reported at the time. The second case, anterior in date to the first, is one of turning, performed by Prof. Simpson, on the 19th of January, and given in the notes published by the Professor on the 22d of March. The third was a case of application of the forceps, in the etherized state, performed by Dr. Des Champs, and published in the *Gazette des Hôpitaux*. With these few precedents to be found at that period in this department of science, and amidst the most sanguine expectations on the part of the scientific world as to the event, Prof. Dubois commenced the investigations now about to be related.

The Professor began by an allusion to the feelings which naturally and unavoidably arose in the mind of one who, unprecedented as it were, had to enter a field of phenomena never witnessed before; and, after dwelling upon the difference of his position from that of the French surgeons, who had instituted their operations after the American and English surgeons had communicated to the world the result of their experience, he proceeded to divide his inquiries into the following heads:

1. *Can ether be the means of preventing pain in operations of midwifery?*

2. *Can ether suspend and annihilate the physiological pains of natural labor?*

Before attempting to give a direct solution of these principal questions, Prof. D. deemed it necessary to investigate the following important points, the elucidation of which will furnish the best elements for a proper answer to the whole of the inquiry. Thus, he desired to ascertain *whether ether could be prejudicial to the mother primarily? If it could inflict any injury on the child also?*

*Whether this agent, after having exerted a stupifying action on the cerebro-spinal nerves, would not induce a paralyzed state of the uterus?*

*Whether being innoxious primarily, ether might not, consecutively, act on the constitution of the mother or of the child?*

As to the action of ether on the child, no one, said Prof. Dubois, can entertain a doubt, considering the diffusibility of its vapor, that when introduced into the mother's system by a large and active surface like that of her respiratory organs, it may pervade the child's system also, by means of those vascular communications existing between the mother and the fœtus. It was natural to examine the very delicate question of the possible amount of this influence, and it will be acknowledged, after hearing the facts I have to relate, that my anticipations have been realized so far as the penetration of ether through the system is concerned, but not in the least, I am happy to say, as to the dangers thereon attendant. On examining the question of the effects of ether on the mother, we find arguments of a special nature, drawn from facts already noticed, during the inhalation of ether in other circumstances. Cases have been witnessed in which the precursory signs of intoxication have consisted in an involuntary, disorderly, and convulsive agitation of that muscular system which is subservient to volition; in some cases also, the intoxication induced by ether has been itself characterized by a kind of epilepsy, or catalepsy, and has either been accompanied, preceded, or followed by convulsions. Now, if through life, we look for a physiological condition in which there may be found a predisposition to phenomena of this kind, we shall remark, undoubtedly, that pregnancy itself acts, but too frequently, as a predisposing cause to that species of nervous excitement which, in some cases, brings the subjects to a fatal end. I allude, as will be understood, to *puerperal convulsions*. It is therefore manifest that ether, during the pregnant state, cannot be exhibited with too great circumspection. In the course of this communication I shall have occasion to relate a case which came under my own notice, and which partially confirms the natural apprehension that ought to be entertained on this subject. This apprehension is moreover corroborated by facts observed in medical practice. Thus, Prof. Piorry brought before the Academy, at the last meeting, cases of hysteria in which he administered ether as a sedative,



and in which the fits, far from being changed for the better, were, on the contrary, rendered more intense, epileptic phenomena having been induced. Another example, illustrative of a similar effect, is founded on the fact of a physician, acting on the same preconceived notion of the sedative powers of ether, having administered this agent to patients laboring under epilepsy, and the attacks having been thereby renewed with far greater intensity than before. And again, it appears that ether was tried in England in a case of tetanus, for the same purpose; namely, of subduing nervous irritability and muscular contraction, but without any successful result. It fortunately happens, however, that in our cases those apprehensions have not been confirmed by accidents of this nature.

Having thus laid before the Academy the scrupulous considerations under which he labored for some time, and which he still desires should be maintained in the minds of the profession, on account of the very small number of experiments hitherto made on the subject, Prof. Dubois next proceeded to examine the principal question. 1. *Does ether prevent pain during obstetrical operations?* This he illustrated by cases, as follows:

CASE I. A woman æt 18, primipara, entered the hospital of the Maternité, February 15th; labor had already lasted 28 hours; the uterine contractions were feeble, slow, and of an intermittent nature. I thought I should probably accelerate the pains by perforating the membranes. I did so, but no change taking place ergot of rye was given; but this again was not followed by the desired result. It was then that I decided on applying the forceps, having previously placed the patient in a state of insensibility by the inhalation of ether. This was accomplished with difficulty, the woman seeing no necessity for it, and being disturbed by the inhalation which she said was very disagreeable. In the course of six minutes, however, she fell into an apparently insensible condition. I then attempted to introduce the first blade, but at that moment she made a short, abrupt motion with one thigh. I therefore postponed the introduction of the instrument and caused the

patient to resume inhalation for two minutes; after which a kind of soporose quiet was brought on, and the first blade was introduced; the placing of the second blade, the prehension of the child's head, the locking of the forceps and the extraction of the child proved very easy. *During all the manœuvre there absolutely was not the least pain.* The expanding of the perinæum and the dilatation of the vulva were so rapidly effected, that I was enabled to terminate labor in a shorter time than nature generally takes to complete the process after it has arrived at the same stage. The child was living. The cord beat 160 times a minute, but within a few minutes after birth the pulsations of the child's heart fell to their normal state—from 136 to 130 per minute. Here we may inquire whether the child had suffered from long labor, from the application of the forceps, or from the ether? I shall presently allude to another case in which the same derangement in the fœtal circulation took place, and where it could not be attributed to long labor, or to any interference of art, the case being a natural one. In the present case, the woman very soon regained her consciousness, and being asked, 'are you delivered?' she stretched both her hands down across her abdomen and answered—'Why, sir, I see I am.' 'Did you suffer at all?' 'No sir'—'although,' said she, 'I felt as if I were surrounded by attendants who came here to deliver me.' This woman had evidently been in a state of complete insensibility, though of imperfect consciousness. The dull perception she evinced of what had been going on around her may be attributed to her having witnessed, before inhaling the ether, the preparatory disposition made for her delivery.

CASE II. A woman æt 19 years, having reached the term of pregnancy, came to the Maternité with lingering pains that had existed for thirty-six hours. She felt greatly fatigued. I considered this a proper case for using the forceps. The patient was made to inhale the ether for ten minutes, a few interruptions having necessarily taken place, after which apparent insensibility came on. I began applying the instru-

ment, but the movements and loud cries of the woman at that moment induced me to readminister the ether. We did so for five minutes, when stertorous sopor was brought on, during which the forceps were easily applied. The patient then began to be somewhat agitated and uttered shrieks; delivery, however, was rapid. The perinæum appeared to stretch out with greater facility than usual. The woman then seemed to become conscious of what was going on, when I said to her—‘Are you delivered?’ She answered, ‘yes.’ ‘Did you suffer?’ ‘No,’ ‘Do you remember having felt any pain or uttered any loud cries?’ ‘No, sir, I can remember nothing of the sort.’

The Academy will notice, said M. Dubois, that in these two cases ether produced different effects, sensibility having been annihilated without the suspension of consciousness, in the first case; whilst, in the second, sensibility was affected in the same degree as in the first, with the difference that consciousness was also totally abolished. Facts of this nature have already been so often presented to the attention of the Academy, that I deem it unnecessary to dwell any longer upon them. The only thing I wish to observe is, that both cases, but especially the first, tend to establish the proposition, that ether may be employed in the practice of midwifery, as it has hitherto been in surgery; that is, to prevent pain during obstetrical operations.

2. *Can the inhalation of ether suspend the physiological pain attending natural labor; and can it suspend the contractions of the uterus and of the abdominal muscles?*

These questions, said Prof. Dubois, are not only of vast experimental and physiological import, but give rise to practical views the value of which no one will be inclined to doubt. The physiological point of the question is, to ascertain whether or not the stupifying action of ether on the cerebro-spinal axis, and the paralysis of the muscular system under the control of the latter, will extend to the uterine parietes. At this period, remarked the professor, the question of uterine innervation is still an unsolved problem. Scientifically speaking, it stands thus—the uterus receives its nerves,

perhaps exclusively, as is the opinion of Longet, from the ganglionic system, on which, however, the spinal cord may exert certain influences arising from the communications existing between the two. Nevertheless it remains an evident fact, that the uterus is an organ the contraction of which can neither be suspended nor in any way modified by volition. This fact implies that this organ receives its nerves from the ganglionic system; and if we admit the latter to be influenced in its action by that of the cerebro-spinal axis, it would probably be found that the origin of that influence is not direct. If these anatomical considerations be true, ether would appear to act exclusively upon the voluntary organs of animal life, and therefore ought not to influence the state of contractions which take place when prompted by organic vitality. I am aware that a distinguished physiologist, M. Brachet, is of a contrary opinion. He thinks the uterus is subject to the direct influence of the spinal cord. In support of his views he cites certain experiments on animals, and a morbid case observed in the human species. The experiments consist in vivisections performed at various points of the spinal cord, after which, says M. Brachet, the uterus becomes inert. The pathological fact is one of paraplegia observed in a pregnant woman. I am not prepared to gainsay the physiological facts; but concerning the case of labor in the paralytic woman, it is far from possessing the value M. Brachet would wish to claim for it; since it is asserted that an application of the forceps became necessary to help labor, at a moment when the dilatation of the orifice would allow the operations to be performed without danger. Now, I will only say this—that if in the alleged case the orifice was dilated, the dilatation could have taken place by no other cause whatever except the influence of uterine contraction. It is probable, however, that M. Brachet's opinion has in some measure prevailed among the scientific world; for many learned medical men have inquired of me recently whether ether did suspend uterine contraction. I am far from pretending in any way to decide these difficult questions. The facts I

am about to lay before the Academy have appeared to me of such a nature as to throw much light upon them; in as much, at least, as the effects produced on the nervous system, the brain and the spinal cord, may be considered a trustworthy criterion. Let this, however, be decided as it may, these cases will not prove the less curious or interesting from being seen under various other points of view. I have already mentioned, and I now recall to mind, a remark I made in the first forceps case related; namely, that at the very moment I attempted to introduce the first blade, the woman had made a kind of sudden effort which succeeded in impeding the introduction of the instrument. I now proceed to far more conclusive facts.

CASE III. On the 5th of February, at 10 o'clock, A. M., I saw, in the amphitheatre of the Maternité a woman pregnant with her first child, who had reached the term of utero-gestation. She had been in pain since two o'clock that morning. The membranes were not ruptured; the dilatation of the orifice measured something more than one inch. Uterine contractions caused pains of an intense nature, which rapidly succeeded each other. To this woman we offered an immediate and total removal of pain. She immediately consented to inhale ether. The process of inhalation was occasionally interrupted by the woman becoming unmanageable during the moment of contraction; it lasted in all 25 minutes, after which she relapsed into a state of complete insensibility. At this period we witnessed a most curious and instructive though highly perplexing, phenomenon—determination of blood to the head. Her face became intensely red; her looks were set, her eyes being fixed upwards and outwards; the conjunctiva was congested to such a degree that I really could imagine blood on the point of issuing from its surface. The under lip was hanging, the tongue tinged, and spumous saliva issued from the mouth. This state lasted for three minutes. Squeezed and pricked during this period, the woman felt nothing. During the state of insensibility, I remarked that the contractions continued, the uterus becoming glob-



ular and hard under my hand laid on the abdomen, while, *per vaginam*, my finger felt the tense bag of membranes protruding through, or rather against the orifice; these contractions were not painful in the slightest degree. Rather preoccupied with the above described state of the woman, I let, no doubt, a few contractions escape my notice, but there were two contractions which I perfectly observed and felt. After three minutes the woman recovered her senses and told me that she had not experienced the slightest pain. During the period of insensibility I had laid my ear on the abdomen, and counted the foetal heart beating 160 times per minute. Very soon after the woman had recovered her senses I found but 140 pulsations, and two or three minutes later they had decreased to 136, the normal state; so that, in this case, as I have already stated, when alluding to it I spoke of the effects of ether on the child, the modification of the foetal circulation could not be attributed to any other cause than the fact that the mother had inhaled ether.

CASE IV. A woman æt 19 years, with child the second time, and arrived at the end of pregnancy, had been in labor since morning; I saw her at 3 o'clock, P. M., when she experienced very intense pains and uttered excessively acute shrieks. Such were her pains that she could not be made to understand that it was in her power, if she chose, to restrain, in some measure, her piercing cries, it really seeming to us that her physical powers alone could fix a limit to her wild and frantic screams. To this woman also we offered ease, and insensibility to her violent pains. To this she lent a ready ear, took the ether, and in three minutes fell into a deep soporose state; the eyes were open and set. She then quietly turned her head towards the female attendants around her bed, and beckoned to one of the midwives to draw near and kiss her. During the period of insensibility the contractions continued violent and energetic; they came and passed away in the deepest silence on the part of the woman. The bag of liquor amnii protruded against the finger introduced *per vaginam*; the fundus uteri hardened under the hand placed on

the abdomen, and, nevertheless, there existed a calm, death-like state of the patient, that offered, when contrasted with the energetic process going on, one of the most striking and unusual phenomena ever witnessed in the practice of midwifery. I then ruptured the membranes and instantaneously a muscular effort was made, by means of which the head plunged deep into the pelvic cavity. At this advanced period of labor the patient awoke, and parturition very soon ended amidst the ordinary series of painful phenomena. After the expulsion of the fœtus the mother thanked me mildly for the relief I had afforded her. When I asked her how she felt, and whether she remembered what had passed, she answered, she felt very well, and that she 'had dreamt.' What did you dream of? was my inquiry; but the patient turned her face aside with a smile, the peculiarity of which having attracted my particular attention, I resumed the question. On her again refusing to let me know the nature of her dream, I had recourse, in order to ascertain it, to the intermediate communication of a reputable person of her own sex, who had assisted in the administration of the ether. To the same question, proposed by this person, she answered, that she had dreamt she was beside her husband, and that he and she were engaged in those preliminaries which had led to the state in which we now beheld her.

It now remained for me to ascertain whether this kind of ebriety, the effect of which had hitherto been to prevent pain without interfering with uterine contraction, could impede, or not, the action of the abdominal muscles.

CASE V. A woman æt. 18 years, came to the Hôpital des Cliniques a few days ago. Labor was in an advanced stage; the bag of waters had given way; dilatation was complete; the head deep in the pelvis. The uterine contractions in this female were very painful indeed. She readily consented to be etherized. After ten minutes she became soporose, complaining of ringing in the ears, and saying she felt herself dying. Uterine contraction, together with the action of the abdominal muscles, continued throughout in a most evident man-

ner; the uterine action becoming more and more frequent, the head and body of the child very easily and promptly cleared all the obstacles to their passage, and that without producing the slightest manifestation of pain in the woman. In this case I remarked the singularly relaxed state of the lower extremities, which had been placed, before etherization was resorted to, in the semi-flexed, angular position, according to the French custom. The moment insensibility was induced and the knees were no more supported by the hands of the assistants, the two limbs fell outwards, flat on the bed and in such a relaxed state, that they had a tendency to rotate still farther outwards had not the coxo-femoral joint proved an impediment to this exaggerated movement. The child was living, and it was its cries that awoke the poor mother, whose first thoughts and words were: 'Is it a boy or a girl?' The patient assured me she had not suffered in the least, only that it had appeared to her that she had been in the act of evacuating her fæces.

I must here subjoin a fact, which I have commonly observed in the course of my researches on the action of ether in those special cases—it is the extreme apparent laxity induced in the muscles of the perinæum. Even with primiparæ, the dilatation of those parts has been so rapid, that in the cases where parturition took place during the state of insensibility, the duration of which never exceeded fifteen minutes, the expulsion of the child has been painless; and we must remark, as worthy of notice, that one of these women bore a child weighing eight pounds, and that in her case the perinæum was not damaged in the slightest degree. I must also make the very important remark, that the uterus, after delivery in all the cases, has constantly and immediately resumed the firm, contracted state of its retracted parietes.

A last and very important question shall conclude my researches on this subject. I allude to the *consecutive effects of etherization on those patients*. None of the women who inhaled ether have experienced bad effects attributable to this agent. One of them felt her fingers benumbed for twenty-four

hours; another complained of her legs being slightly benumbed also, and for about the same length of time; after which this feeling entirely disappeared in both cases. We noticed no cephalalgia whatever, no bronchitis, no nervous symptoms of any kind. Nevertheless, two of these women died of metro-peritonitis, and precisely those two who underwent the application of the forceps. I have put to myself the question, whether the exhibition of ether did in any way contribute to the fatal result in those cases? On questions so imperfectly elucidated as those relating to the influence of ether on the animal system, and to the etiology of puerperal disease, all kinds of hypotheses may be advanced; still it appears to me that, having conceded to the doubts that may arise all the weight they deserve, we should inquire whether any other circumstances were present, apart from the inhalation of ether, that might explain, in a more natural and satisfactory manner, the serious results to which I have alluded. Should we not inquire, for instance, whether the difficulties of parturition did or did not exert any deleterious influence in the cases? Then, are we not bound to ascertain what may have been at that moment, the sanitary state of the hospital? Whether the patients, who had not been etherized, were at that period equally subject to puerperal fever? Whether mortality prevailed, and to what extent, in all these cases? And last of all, whether the *post mortem* appearances in these two females were similar to those generally observed in the bodies of such as have died of the disease?

In answer to these questions I will say, that the delivery of the two women who died did take place under circumstances that may easily account for death. The application of the forceps in itself was prompt and easy, but one of the patients had been in labor 40, and the other 38 hours; such, we are well aware, are very unfavorable preliminaries to delivery, and in these cases they proved the more untoward from the circumstance of the Maternité being at that period under the influence of a slight epidemic puerperal fever. I may add, that the disease was equally prevalent among those patients who

had not inhaled ether; that mortality prevailed to a great extent; and lastly, that the morbid lesions found on the *post mortem* examination of these two cases, were precisely and exclusively the same as those observed and recorded on the examination of other unetherized patients who died in the hospital about that period. We need not hesitate, therefore, between the choice of gratuitous hypothesis and well authenticated facts. We are bound to decide that ether, up to this moment, is not chargeable with any fatal results, and from the foregoing observations on the subject of this agent, considered in its applications to cases of midwifery, I feel myself justified in drawing the following conclusions: First, that the inhalation of ether has the power of preventing pain, during obstetric operations. Second, that it may also momentarily suspend the natural pains of labor. Third, that the state of ebriety induced by the inhalation of this vapor does not suspend uterine contractions when the latter have decidedly set in and take place at short intervals; and that it does not impede the synergetic action of the abdominal muscles. Fourth, that the state of ebriety appears to lessen the natural resistance which the perinæal muscles oppose to the expulsion of the head. Fifth, and finally, that the inhalation of ether has not appeared to exert any bad influence over the life or health of the child.

Now, after hearing the foregoing conclusions it may appear natural to suppose, that the inhalation of ether being a process to which so many advantages are attached, it is a precious expedient, to be frequently resorted to in ordinary cases, by the obstetrical practitioner. Such, however, is not my opinion. The very proposal of such a thing, having no other ground than the very few facts I have communicated to the Academy, would not only appear extremely bold, but should be considered as eminently imprudent. In beginning this communication I expressed the apprehension under which I labored at first; well, the cases I have brought before the Academy may have lessened my fears, but they have not yet altogether dissipated them from my mind. You will remem-



ber that one of the women who inhaled ether went into a state bordering upon that which we designate by the term *epileptiform*. Two other women died. Now, although the morbid occurrences in the first case were of but short duration; although the fatal result, in the two other cases, arose far more probably from the influence of the epidemic than from any other cause; still, the Academy will feel that in a question of so serious a nature, the recollection of these facts ought to leave on my mind impressions of doubt and timidity. Later, perhaps, these hesitations may disappear; but even then I shall not forbear thinking, that the very nature of things must render the exhibition of ether, in ordinary cases of midwifery, a matter of very doubtful propriety. First of all it is evident, that the inhalation can never produce painless labor, from beginning to end. It is to be doubted whether insensibility could be made to last long enough for such a result; and it is more doubtful still whether such an attempt could be made without incurring positive danger, and without being amenable to the charge of criminal temerity. There remains therefore for employing ether, only the last period of labor, as in the cases where I have used it; and even then, this period, during which its exhibition has appeared the most effectual, is the one, according to all mothers the least fatiguing, the least painful of all the stages of the process of parturition.

As to the use of ether in cases where it is necessary to resort to instruments, I will only observe, that operations of this kind are often rendered indispensable by unforeseen circumstances, and that when this necessity occurs, the cases are of a very urgent nature. It is not necessary to give further developement to the propositions I lay down here, in order to show that in a great number of such cases inhalation of ether cannot be resorted to. As to the remaining cases, it may be asked whether they prove to be generally of so painful a nature as to justify the common use of a process which, even in a condition unconnected with the puerperal state, is not free from disadvantages, and which, when used under those special conditions, seems to me still less free from danger. My pro-

found conviction on the subject is, that inhalation of ether in midwifery should be restricted to a very limited number of cases, the nature of which ulterior experience will better enable us to determine.

Such was the first scientific communication made on the subject of the inhalation of ether in the practice of midwifery. Prof. Dubois has the intention, at some future time, to publish a memoir on the subject. In the mean time some additional cases have been recorded by M. M. Chailly, Bourier, Stoltz, and Danyan, which we now proceed to notice.

This memoir, by Prof. Dubois, was, as we have already stated, the first systematic attempt made in France towards ascertaining the action of etherial inhalation when applied to the practice of midwifery; and we believe the scientific world will esteem it the most important, since it gives a solution of most of the problems connected with the use of this agent. The remaining facts that have been published in Paris may so far contribute to advance the history of etherization as they serve to confirm what Dubois has already advanced, or show certain peculiarities of its action in special cases. Those facts may be given in a few pages. At the sitting of the Academy of Medicine on the 9th of March, M. Bourier related the following case:—A woman *æt.* 26 years, the mother of four children, entered the Hôpital Beaujon, at the full term of her fifth pregnancy four hours in labor. The pains were strong, and intense contractions took place every three or four minutes. The orifice was dilated to the size of a five franc piece. The woman was made to inhale ether about an hour before the probable period of delivery; she became agitated and fell asleep after eight minutes. M. Bourier was of opinion that uterine contractions then ceased completely—the suspension of pains lasted ten minutes, after which slight contractions returned, and three quarters of an hour after this, the pains had resumed their decided character of strength, and become more and more rapid in their recurrence. Delivery took place two hours afterwards. M. Bourier was of the belief that, in the foregoing case, ether was the means of impeding the progress of la-

bor by interfering with the uterine action; and hence concludes, that ether may suspend those contractions when they have not arrived at the last period.

Now, one may inquire, whether the case observed by Dr. B. is not one of spontaneous cessation of pains, such as is often witnessed in the beginning of labor; or whether the suspension was not the direct and immediate result of the inhalation of ether? We feel it to be difficult to give a satisfactory answer; but in view of the two first cases related by Prof. Dubois, in which the pains ceased after long labor, and before delivery was accomplished, we must own that we are inclined, as MM. Roux and Danyan have been, to adopt the first explanation.

At the same sitting of the academy, Dr. Chaillly reported the case of a lady, in private practice, who presented the most unusual sensibility of the vaginal orifice. The vulva was found to be somewhat constricted which had been the case since the last labor, seventeen years before, the lady now being 43 years old. There existed also a slightly contracted pelvis. As application of the forceps became necessary after a labor of 59 hours, ether was given, the operation was effected *without pain, without the slightest laceration of the perineum, and without any ulterior accident to mother or child.* The details of this interesting case are to be found in the Bulletin of the Academy of Medicine, and also in the *Union Médicale* of March 1847.

In the *Gazette Médicale de Strasbourg*, of March 27, 1847. Dr. Stoltz relates a case which somewhat elucidates that part of the question left unsolved by the experiments of Prof. Dubois, and alluded to by M. Velpeau at the Institute; viz: whether ethereal inhalation could suspend or diminish uterine contraction in certain cases, those the most difficult in midwifery—where it is necessary to turn the child in a contracted uterus. No case of the kind had occurred to Prof. Dubois, but as he had proved that ether exercised no influence over normal contractions, it was natural to believe that it would not advantageously modify the state of the uterus during pa-

thological contractions. However experience had not warranted the conclusion, Prof. Simpson's case of turning being one of contracted pelvis, when Prof. Stoltz met with a case most favorable for putting the method to the test.

A woman, æt. 24 years, came to the Clinique d'Accouchemens of Strasbourg on the evening of the 4th of March. The membranes had been ruptured since the preceding day; the uterus was strongly contracted, irregular in its figure, and tightened around a child, which presented the right arm, the right foot, and a loop of the umbilical cord without pulsation. Professor Stoltz after having brought the patient into a state of insensibility by the exhibition of ether, seized the presenting parts, but tried in vain to extract the others. The uterus, during etherization, offered an insurmountable resistance. He therefore undertook to extract one foot alone; it was only after some time that he was able to place his finger, in the manner of a hook, on the left groin, and thus he proceeded to extract the child as far as the head. It was then that he experienced the greatest amount of resistance. The woman was left to repose an hour. At last a few contractions took place, and new efforts being made, which nature seconded, delivery was easily performed. This is a very conclusive case, and the question now appears to be definitively resolved: *Etherization does not suspend either normal or pathological contractions of the uterus.*

In the May number of the *Revue Medico-Chirurgicale*, M. Danyan, professor of midwifery at the Maternité, has published a paper on the employment of ether in obstetrical practice. He presents the reader with an admirable summary of the experiments hitherto made on the subject, but adduces no new facts of his own personal observation. He introduces into his paper a passage from Longet's remarkable memoir on the subject, which is as follows: "In the midst of the general and profound collapse, says Longet, in which the organism is involved, and of the proximate danger which threatens it with destruction, an attentive sentinel is still awake. This vigilant agent of protection is the organ which

constitutes the primary motor of the respiratory mechanism.—it is the rachidian bulb. On it depends the maintenance of respiratory motion, and also the dilatation of the nares and mouth, the opening of the glottis, the elevation of the costal and scapular regions, the contraction of the diaphragm and of the *abdominal muscles*, inasmuch as they are considered muscles of respiration. Now, *effort* in general, and particularly that which accompanies parturition, is but a modification, a momentary change of the respiratory function; it is a state during which there must exist energetic contraction of the costal and scapular muscles, of the diaphragm, of the muscles of the abdominal parietes; during which, as Isidore Bourdan and J. Cloquet have justly observed, the glottis is spasmodically constricted; during which many other muscles also contract by that law of synergetic action on which Barthés has written his numerous and valuable papers. If, during etherization, in the absence of volition, respiration still goes on in all the integrity of the function, and if the bulb continues exciting the muscles which accomplish the act, the effort which is the result of the contraction of these identical muscles (those of the abdomen included) must also, it follows as a consequence, take place; for if, in the majority of cases, the muscular contractions which produce an effort are under the influence of volition, there are some instances in which they appear to be independent of the will. It is precisely this exception which we are called upon to witness at a certain period of labor, in certain operations, as lithotomy and lithotrity, in which the contractions of the uterus or bladder are irresistibly followed in their action by that of the abdominal muscles, diaphragm, etc. As to the perineum, if it ceases its contraction in parturient women under the influence of ether, as Professor Dubois has recently observed,—if its natural resistance is annihilated, and if it falls into the general collapse of the muscles of animal life, it is because the perineum does not constitute a part of the respiratory muscular apparatus, as we see that the abdominal muscles do. It is because during the effort, which is of an involunta-



ry kind, it is merely depressed under the weight of the abdominal viscera, and only opposes to the effort a *vis inertia*, principally through the medium of its aponeurotic layers. I allow, on the contrary, that during an effort directed by the will, the perineal muscles will contract, but in the same manner as many other muscles that are not under the direct influence of the respiratory centre, and simply in accordance with the law of synergy to which I have already alluded."

Dr. Campbell has taken the deepest interest in the subject of etherization in obstetric practice, and I feel very sure has made a faithful report of M. Dubois' admirable memoir. I regret that I could not avail myself of the advantage of seeing his report in the London Lancet before completing my own translation. I am persuaded, however, that the inherent interest of the subject will render your readers comparatively indifferent to any faults of style, which may be detected in a hasty performance.

A curious question is frequently propounded to those who propose employing ether to abolish the pains of labor, which is, can such an interference be justified on christian principles? "In sorrow thou shalt bring forth," was the decree of the Creator, and how, it is urged, can you render labor painless without a presumptuous contravention of the Divine will? My answer is, that the principle, if followed out, would lead to a passive submission to all the physical ills which impend our state. The vaccine virus was just such a contravention, and precisely this objection was urged against it, as it had been previously urged against inoculation for small-pox. But I do not apprehend that physicians will interpose any such objections to the use of ether in obstetrics, and therefore dismiss this topic for others of greater practical moment.

Baron Dubois, as has been seen, does not believe that the agent will become universally, or even generally applicable to ordinary midwifery practice. He is convinced that ether will be applicable to but a limited number of peculiar cases.

Professor Simpson, of Edinburgh, is much more sanguine in his views. He has pushed his experiments with great industry, and some months ago, it is stated, had used the agent in fifty cases, and in every one with perfect safety and success. Certainly, therefore, so far, the facts are in favor of his opinion. Not only in his cases, but in all the cases published, the relief from pain has been great and almost instantaneous; and, at the same time, no untoward accident has attended the ether's use. It has been alleged, that hemorrhage would be more likely to ensue; but as the uterus is found to contract as well when it is used as when it is not, I do not see why this should be so. Convulsions were apprehended; but in all the recorded cases no such accidents followed its administration.

Dubois bases his opinion that ether can never come into general use upon two principal grounds; 1st, the small number of cases which had fallen under his observation; and 2d, the impossibility, or probable danger of keeping a woman etherized for several hours. But Professor Simpson kept up the etherization in some of his cases for hours, and other obstetricians have pursued the same practice. Dr. Protheroe Smith, of London, reports cases as favorable to the practice as those of Prof. Simpson, and is quite as warm an advocate for the use of ether in ordinary cases of labor. He closes an exceedingly interesting lecture on the subject with the following remarks:

"In conclusion, I would state it as my opinion, that with perfectly pure ether, carefully administered by skilful persons, and with good apparatus, and especially by one containing an appendage with a supply of oxygen, the operation not being commenced until efficient etherization is produced, the employment of ether is not only justifiable, but promises to be instrumental in materially diminishing the dangers of operative midwifery. Probably, in natural cases it will be both sufficient and safer to carry the etherization only to the second stage, in which partial consciousness remains, but sensation is abolished; and towards the end, when the pains are ordinarily intolerable, to

induce perfect narcotism. From the results which I have already obtained, it is my intention to continue the use of this valuable agent, and I do not hesitate to state my belief, that future experience will fully confirm my present opinion."

Dr. Smith, in the same lecture, refers to other applications of ether in forms of disease allied to obstetrics, and relates that in several cases of dysmenorrhœa it acted like magic. A case of puerperal mania, he informs us, was immediately and permanently relieved by it; and late Journals make mention of cases of neuralgia, colica pictonum, and asthma, in which it was used with striking success.

Is the administration of ether attended with no danger? This is a grave question, and gravely to be pondered. We have seen that Baron Dubois does not look upon the agent as devoid of powers to do mischief. In all his cases, he believes it was innoxious, and it appears to have been equally so in the hands of Professor Simpson and Dr. Smith. Still, who can say, that however harmless, hitherto, it will never prove disastrous in its action? Time only can determine such a question. Observations must be greatly multiplied before we can be firm in such an assurance. Meantime, by oxygen and electricity, practitioners are preparing themselves against the casualties likely to arise in cases of its administration.

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.* By  
DAVID W. YANDELL, M.D., of Louisville, Ky.

I begin this letter with sketches of some of the most distinguished Physicians of this metropolis ; how it will be concluded will depend upon the topics which may emerge in the next few days. It is not always in the power of a student, even in Paris, to impart that variety to his letters which “the mind of desultory man” enjoys ; but, as I take the aim of your readers to be something higher than the simple gratification of taste, I am not without hope that they find an interest in my merely professional details. The mingling of the *utile* with the *dulce* is a feat reserved for the favored few to execute. Most mortals must be content with achieving the first, and happy should they be to feel that they have been useful.

*M. Chomel*, professor of clinical medicine at the Hôtel Dieu, is in his sixtieth year, though I think if it were not for a stoop

in his shoulders he would not appear so old. The expression of his face is pleasant and determined. His head is round, and not badly proportioned; his eyes are black, shaded by handsome eyebrows; his nose turned up, his mouth small and round, his hair thick and gray. In manner he is considerate to his pupils, kind and conciliatory to his patients. Like the majority of French lecturers, he speaks fluently, rapidly and distinctly. Making usually but few clinical remarks at the bedside, his service cannot be considered interesting, unless his lectures—which during the winter he delivers three times a week in one of the amphitheatres of the hospital—be considered as forming a part of it, when it is at least not wholly devoid of interest, if lacking in that spirit which makes the service of some of his colleagues so attractive.

*M. Rostan*, also professor of clinical medicine at the Hôtel Dieu, I should say was near the same age as *M. Chomel*, though he is a younger looking man, of medium height, round body, broad, short, open and agreeable face, good head, medium forehead, thin, grayish hair wanting on top, hazel eyes, small mouth, and common nose. This portrait may not strike you as being very like the engravings that we see of the great American philosopher; but I never was more forcibly impressed with the resemblance between any two faces than when, coming one morning from the Hôtel Dieu where I had seen *M. Rostan*, I saw an engraving of *Dr. Franklin*. *Rostan* is a pleasing and occasionally an animated speaker, clear in his reasoning, and careful in his deductions, and always exhibiting in his remarks, both at the bedside and in the lecture room, the warmest desire to communicate sound, valuable and practical knowledge to the troop of students, native and foreign, who attend his clinics.

*M. Andral* is a very ordinary looking man, fifty years of age, five feet eight or ten inches in height. His hair is grayish, thin on the crown of a medium sized head, long behind and in front. With a stoop in his carriage, a slim and not very well formed person, a large and long nose, and thick lips, no one would ever point him out as the professor of pathology and



general therapeutics in the *École de Médecine*. His service at *La Charité* is attended by few, in fact by no students, because he does not seem to care about imparting instruction at the bedside. As a lecturer I spoke of him in a former letter.

*M. Bouillaud*, professor of clinical medicine at *La Charité*, in many respects is *Andral's* opposite. His carriage is erect, his head unusually fine, his forehead broad, round, high and full, his eyes dark and animated, overhung by black, thick eyebrows; his hair thin, long, and black, sprinkled here and there with gray; for he, too, is fifty years old. His face is thin and his cheek bones high, his nose large and one of the most expressive features of his countenance. Intellectuality and intensity are the predominant and indelible characteristics of the man. In his bearing towards his patients he is unnecessarily severe and abrupt, and towards his students touchy and ill-tempered. He lectures with great earnestness, fire and grace. His sentences are now round, beautifully turned, ringing and compact, and again, as he becomes engaged in the discussion of his favorite doctrines, or even when presenting some important question, his thoughts flowing as rapidly as lightning, and growing more earnest as he proceeds, they become nervous, and sometimes abrupt, and almost jerking.

*M. Louis*, one of the physicians at the *Hôtel Dieu*, is a striking looking, finely formed man, standing six feet in his socks, sixty years of age, with a fair head, high forehead, thin, short, brown hair, broad, thick whiskers, straight, handsome nose, crossed by a pair of spectacles, well shaped mouth, round chin, and blue eyes. He struck me as being a fine looking, sour-tempered man, particularly unkind to his patients, and not especially pleasant to the three or four pupils who follow him.

Of *M. Rayer*, author of an able work on cutaneous diseases, I have already spoken.

*M. Cruveilhier* is a round, pleasing, amiable looking man, fifty-six or fifty-seven years old, five feet seven or eight inches in height, with regular, handsome features, eyes dark and large, mouth expressive of amiability, hair gray, and small whiskers of corresponding color. His manner to his patients is kind.

As a lecturer he ranks low, probably lower than any other professor in the School of Medicine. His voice is sadly against him, being weak and without either volume or music. He speaks without animation, in a singsong, and dwells long upon what is frequently least important in his subject, often seeming not to seize—as he certainly in many instances fails in developing—the cardinal points of his matter. Very few students attend his lectures; and when they have been, as I may say, spoiled by listening to such speakers as Denonvilliers, Dumas, Trousseau, and others of the same order, I only wonder that any at all have the patience to *endure* him through an hour. I say endure him, because one must have good ears, keep them well open, and sit close to him, in order to hear the fifth part of what he says.

*M. Trousseau* is an elegant looking, and very handsome man, of fair complexion, long, black hair, which he combs directly back from his face, long Bourbon nose, blue eyes somewhat sunk in his head, which is of medium size. He wears broad, thick, half-whiskers. He is an orator. Clear, earnest and graceful, with a fine voice, person and eye, he at first commands the attention of his auditory, and then fixes it by the attractive manner in which he presents the well digested matter of his numerous attended and instructive lectures. *M. Trousseau* is not yet quite forty-seven years of age, and is, as you know, professor of therapeutics and materia medica in the School of Medicine.

*M. Piorry*, professor of internal pathology in the School of Medicine, is about fifty-three years old. He is a tall, round-shouldered man, with a long face, long nose, wide mouth, thin lips, small black eyes, and immense black whiskers. He speaks well, that is to say, as well as a man without grace of manner or person, or flexibility of voice, can speak. His style is earnest, and could he throw a little grace into his gesticulations, and give the least possible softness to his voice, he would please much more than he does. The expression of his face, like the tones of his voice, is *hard*, and not intellectual, but firm, unbending and determined—in a word, indicative of the

character of the man. Laborious and persevering, no task and no number of defeats deters him from the pursuit of his hopes. He said, while a young and unknown physician, "I will one day fill a chair in the School of Medicine." Five unsuccessful *concours*, so far from disheartening him, seemed to inspire him with new and greater determination, and at the sixth, triumphing over every obstacle, he demonstrated in too unmistakeable terms his capacity, and was raised to the chair which he now occupies. His eye is sharp and penetrating, and with his head slightly sunk between his broad shoulders, his huge whiskers, and his stony voice, he strikes one, after all—at least he did me—as being by nature better fitted for a commander of infantry than a teacher of medicine.

*M. Dubois*, professor in the faculty, (*Clinique d'Accouchement à l'Hôpital de la Faculté*), is about the age of *M. Piorry*. He is not so tall, and is the mildest, most amiable, benevolent and harmless looking man imaginable. His complexion is fresh; his hair, wanting on the crown, is brown, and thin on the sides; his nose is long, his chin long and round, and his eyes blue. There is a singular depression about the center of his head, seeming as if produced by some sharp-edged heavy body, which had pressed gradually upon the middle of the parietal bones and raised up the frontal and posterior portion of the cranium. As a lecturer, he is pleasant, popular and practical.

These are unfinished and defective portraits—copied from my note-book—of some of the principal Parisian physicians. In all cases I have given my opinions candidly and my impressions fully. I have spoken and will only speak of the different gentlemen as they appeared to me in the wards and amphitheatres of the hospitals, and in the halls of the School of Medicine. And now, after having, with probably as unprejudiced a mind as one could well possess, followed in their visits and attended some of the lectures of the greater part of the men to whom I have alluded, my opinion is, that *Bouillaud*, of *La Charité*, is the greatest man of them all; and if to his other qualities he joined the kindness of manner to the

patients entrusted to his care possessed by Dr. Norris, of Philadelphia, I should say that he was my choice of all the physicians I have ever seen. I do not here speak of his doctrines, as I do not intend speaking of those of any of the others; but I wish to be understood as alluding especially to his powers as a diagnostician.

Chomel seems to me to belong to the bygone generation. He is at best but an ordinary man, and owes the professional position which he occupies as much to his kindness of manner to his patients and his pupils, aided by other circumstances, as to any particular strength of mind or fund of knowledge.

Rostan, as a teacher at the bedside, is without an equal in Paris; but he has occasionally wandered from the austere and rugged paths of science, and worshiped at other than her altars, and, as is inevitably the consequence, except in men of the highest order of mind—and in some cases even with them—although endowed with a fair share of talents, and of very popular manners, he has halted this side the great goal, and will never be canonized.

Andral belongs to no common order of men; but there is ever an uncertainty in his mind as to his diagnosis—a laboring after something which he does not reach—a timidity in the formation of his opinions, and a hesitancy in their expression, which deters one from forming that estimate of him which we might otherwise be disposed to do.

Cruveilhier, while considerate to his patients, is a better anatomist than physician.

Rayer, with all his cumbrousness of person, is unquestionably the possessor of a clear, far-seeing, bold and discriminating mind. His wards usually abound in interesting cases, but from his making so few remarks his visits are comparatively profitless to the student.

Louis is not the great man in Paris that he is in the United States; but divesting the mind of the opinion entertained of him in either place, is he a great physician? I answer unhesitatingly in the negative, to this question. As we all have our own ideas of a good lecturer, so we have them of a great

physician. To be a great physician, a man must not only be able to arrive at a diagnosis, but must be able to do so quickly; he must not only be able to ask questions of the patient which will put him upon the desired track, but he must do it and not confound the person with a long, tedious and useless catechising; and above all things else, his diagnosis made, and his prognosis given, the autopsy—if the disease terminate fatally—must support the one, and the result of the case confirm the other. Louis can make a diagnosis, but it is always after a long examination of the disease, and useless questions to the patient; and too often, as any one who has followed him in his visits can testify, has his diagnosis been contradicted at the autopsy, which at last, in most cases, is the only true and legitimate method of ascertaining the capacities of the physician, and the accuracy and value of his knowledge.

I look upon Andral as superior to Louis; Rayer as superior to Andral; and Bouillaud as superior to them all. There is a cast about the mind of Bouillaud which in our eyes is to be preferred to that of any of the others. Bold, vigorous, quick and acute, he is endowed with perceptive powers to an unusual extent. Original and well disciplined, he generalizes and classifies with rapidity and correctness; discriminating, he readily detects error, and, fearless, he independently exposes it. His powers of generalization, backed by a strong disposition to exercise them, have undoubtedly led him to advance principles which many of his brethren deem untenable. The quickness of his perception conveys him with astonishing celerity to the core of a subject, and he is vexed because others, less fortunate in this particular endowment, still traverse with slow and measured steps what he has passed at a single bound. Bouillaud's diagnosis made, he reveals it on the spot. Louis, as a general rule, although doubtless in the majority of cases he has arrived in his own mind at the diagnosis of the disease, does not avow it, and it is sometimes four or five days before he allows it to leak out. It would be folly to question Louis's knowledge of the physical signs of disease, but the want of powers of combination, which we suppose no unprejudiced



man will claim for him, cripples him in his deductions, biases him in his opinions, creates distrust of them in his own mind, and inspires an unpleasant doubt of their correctness in the minds of those who follow him in his visits. Bouillaud, it may be said, is over-confident. The rapidity with which he diagnoses would at first lead one to this opinion; but then, if one will take the trouble to eliminate gradually what he has probably deduced on the instant, he will find in the majority of instances that Bouillaud has reason to be confident, because he has arrived at the truth. Bouillaud is irritable—he belongs to the *genus irritabile*; Louis is irritable, without being able to establish any claims to membership in the same class.

*Cerebral Affections.*—M. Rostan is in the habit, every year, of devoting a few clinical lectures to the special illustration of diseases of the brain, in which department of science, as you are aware, he has done more than any living physician. In one of his late lectures he examined the value of paralysis as a diagnostic sign. His remarks may be summed up as follows:

Paralysis is one of the most striking and unerring signs which can exist to mark the seat of cerebral lesions. It should be studied in its seat, extent, intensity, march, duration, and in all the different circumstances which may impart to it different characters. The seat of the paralysis indicates, in the first place, the part of the brain where we find the organic alteration; but much is required to be able, after that, to determine precisely in every case the extent of this alteration. If a circumscribed paralysis corresponds to a circumscribed cerebral alteration, it is possible that this paralysis, occupying both the arm and leg of the same side, may be produced by a simple lesion of small extent, situated upon the confines of those portions of the brain which preside over the movements of the two members, and act equally upon the one and the other. In the appreciation of the extent of the lesion, you must take into account also the intensity of the paralysis; but you must not think that in this respect the relations are mathematical; for an organic lesion of circumscribed extent may produce a

very complete paralysis, as, on the other hand, an extensive lesion may give rise to a paralysis so slight, that one may even in some degree doubt whether there really exists any anatomical disorder or change. When I first discovered *ramollissement* of the brain, I feared that it would not be possible, during life, to distinguish this from other alterations of that organ—that, occupying the same situation, it would manifest itself by the same phenomena.

But the mode of invasion, the march of the disease, will not be the same as those, for example, of cerebral hemorrhage. They differ in effect; whence the necessity of bearing in mind the march of the affection. If the paralysis is sudden and without precursory phenomena, it is extravasation of blood—cerebral hemorrhage—that you should suspect in the great majority of cases, remembering at all times that there are exceptions to the rule. Thus in certain cases of *ramollissement*, while the lesion is not very extensive, it may produce no sensible trouble; but the day comes when its volume is such that suddenly the phenomena appear with fearful rapidity. This is the drop of water which overruns the vase. The analogy is true. As there are *ramollissements* without precursory phenomena, so these phenomena may occasionally precede the congestion or cerebral hemorrhage.

After examination of the seat and the extent and precursory phenomena, you must look at the march of the affection. A paralysis declares itself, and augments day by day; suddenly there may supervene a diminution of the symptoms, a passing amelioration, and this is a circumstance which may lead you into error; for paralysis, even when increasing, has not always a regular march. Under the influence of a sanguine emission, the compression of the pulp may momentarily cease, and consequently the paralysis diminish. This now explains how there may be greater or less alteration in the intensity of paralysis. The paralysis which succeeds cerebral hemorrhage may disappear or persist, according to the manner in which the effusion is made. When the blood has simply separated the cerebral fibres, you can easily understand that in the pro-

portion and measure of its absorption the phenomena of paralysis will disappear; when it has destroyed the cerebral fibres, then the power of motion is wholly lost, and it is in vain that you employ electricity, nux vomica, blisters, etc.

I remember two curious cases of paralysis analogous to some of which you have perhaps read. One was a subject who had been paralytic for many years; he could not walk; his house took fire; he sprang from his bed, walked alone to escape being burned, and was cured. A hemiplegic woman was received at Salpêtrière. Some of her acquaintances put her in communication with a miracle-worker, Prince Hoenlohë. Prayers were said for nine days; at the end of the time predicted by the prince, the patient was cured, having recovered her movements. This case made so much noise that the governors of the hospitals believed it their duty to institute an inquiry, and they asked me my opinion. My reply was simple, and destroyed all the marvelousness of the miracle. In the first place, it is possible that a moral cause might act upon the brain like the blow of a club upon the shoulder, and that there may not have been a material destruction of the encephalic substance. In other cases there have been hemorrhages, effusion between the cerebral fibres; the effusion is absorbed, and motion does not return, simply because the patient has lost the habit of exercising his limb. Let a cause, it makes no difference what, compel this movement, and the patient is cured. With this woman two things were possible: either that she was in this last condition, and the persuasion that she would be cured had actually given her this movement; or, what is also supposable, she had simulated paralysis in order to enter the hospital, and not finding it quite as agreeable a place as she supposed it would be, became weary of her situation and resolved to change it.

From the nature of the lesion by which it has been produced, it follows that paralysis terminates by recovery, or increases, or remains stationary, and that the treatment should be directed not against the paralysis itself, which is but a symptom, but against the lesion which has given rise to it.

*Etherization in Meningitis.*—M. Besseron, physician of the hospital of the mustapha, in Algeria, addressed a note to the Academy of Sciences upon the employment of etherization in the treatment of cerebro-spinal meningitis. This agent appears to have produced some good results in this affection. M. Besseron has observed that in patients thus treated, there is at first a little exaltation, soon followed by a sedation, of which the effects have been advantageous.

*Structure of the Brain.*—M. Pappenheim sent a paper to the Academy of Sciences upon the structure of the nervous centers. He has endeavored to penetrate the profound mechanism of the structure of the encephalon. The general conclusion of his memoir is, that the encephalon is composed of plates or lamellæ—an external, a middle and an internal plate. The nervous trunks arise only in the middle lamella. This disposition does not exist in all parts of the brain; when it does not exist, the nervous trunks arise from two lamellæ at once; but whenever there are three, they arise only from the middle.

*Luxation of the Elbow.*—There is an example of this luxation in our wards, said Professor Roux a short time since, which affords me an opportunity of offering you some remarks upon the nature of this lesion. The nature of the case was not recognised by the physician who was first called in. You have never known me, he remarked, especially at the bedside, accuse a professional brother of having committed an error; the blame, always out of place, will often be unmerited when it concerns a traumatic affection of the elbow. The articulation is studded with osseous projections which cannot be felt, or which may be confounded the one with another, because of swelling, particularly in women, and still more among children, when they are but slightly disclosed. Our best surgical treatises are, moreover, as regards the diagnosis of these luxations, indefinite and unsatisfactory. For example, they tell you that in the displacements backwards the forearm is

always flexed, and that this flexion, with the projection of the olecranon behind, will constitute the two essential characters of the lesion. Now, very often the position of the limb is nearer that of extension than flexion, and in trusting to the pretended constancy of this sign you will be led into error of diagnosis. The displacement is overlooked, especially in children and women, where the osseous projections, as we have said, and the muscles are less clearly defined beneath a tumefaction which, although varying in degree in different cases, is always present. It requires sometimes long practice to avoid this mistake. I have seen ten or twelve dislocations of the elbow thus overlooked, or, to speak more plainly, misunderstood, and left for a long time without any attempts being made to reduce them. It is a fortunate circumstance that after many weeks, and even after many months, we may still very often succeed in reducing them. If we fail to do so, the motion of the joint is in a great degree lost, and the limb remains permanently extended just as if it were composed of one piece.

I will cite you to a case of success: I choose it among those that I have myself observed, because, apart from the pathological interest which attaches to it, there is something of romance connected with it. It was twelve years since, in a foreign country. I was at Milan, having just returned from Pavia, (where, I may remark in passing, I saw the head of Scarpa macerating, unhonored, among other anatomical specimens in a tub.) On my return from this excursion, I found some gendarmes awaiting me at my hotel. At that time recent troubles prompted stringent measures of precaution concerning travelers. For a moment I was a little alarmed. The commandant of the detachment advanced towards me, announcing as he approached that he came to consult me about his son. As you may imagine, I was instantly relieved. His son, who was in the Austrian cavalry, had about five months before fallen from his horse and dislocated his elbow. The nature of the lesion escaped the first physicians who were called in. Panezza, and the successor of Scarpa, to whom the



patient afterwards presented himself, said they had seen the luxation too late, and made no attempt to reduce it. I examined the elbow; the displacement was evident; there was scarcely the least mobility between the bones. I told the father of the patient that I had often reduced ancient luxations, but none had been in a state similar to this; that I was desirous of attempting it, however, without warranting success; that at any rate there was no danger from prudently directed efforts. I employed a number of robust men in extension and counter-extension, and succeeded. I have seen since many similar examples of success.

Carried too far, these attempts at reduction may produce serious accidents. Unnatural adhesions may be formed, and I only wonder that we do not more frequently fail. I myself have never observed any other accidents here than the fracture of the olecranon; it occurred at the moment when the flexion of the forearm completed the reduction. There was no laceration of the integuments, nor any other unpleasant consequences; but the joint regained its mobility only very incompletely; extension remained limited, which, however, offered less inconvenience than if the limit of motion had been in the opposite direction.

Fractures of the elbow also present great difficulty of diagnosis. It is often hard to pronounce upon the seat, direction, and sometimes even upon the existence of a solution of continuity of the bone. This is easily understood: the least derangement in a machine—the breaking of one of its wheels, the bending of one of its teeth—and its movements are clogged; the apparatus stops. The same is the case with the articulations, and especially with those that are unequal, as of the elbow. We feel that it is not always an easy matter to perceive the spoke of the wheel which has suffered, and the exact alteration which it has experienced. We must be careful in the diagnosis and reserved in the prognosis, remembering that simple contusions of the elbow, especially among children, may lead to ankylosis. If in practice credit has sometimes been given us for cures in which nature has largely contrib-

uted to success; more often still have reverses been laid at our door for which the gravity of the lesion alone was responsible. One of my best pupils and one of our most distinguished provincial surgeons, M. Fleury, Jr., had given the most assiduous and enlightened care to a fracture of the elbow; pronation and extension unfortunately remained embarrassed, and it was impossible for me to persuade the patient that it was not the fault of the surgeon. You must not be too sensitive, but prepare yourselves for similar reproaches, which the most able have received before you.

*Sarcocele.*—We are going presently to operate, continued M. Roux, for a sarcocele; but before doing so, I wish to say a few words concerning the complication, or, more correctly, the coincidence of hydrocele with cancer of the testicle, for this dropsy may be the source of a singular error of diagnosis. The serous effusion may disguise the alteration of the gland; an optical illusion may induce the belief that the serosity is greater than it really is, and the solid tumor less voluminous. A thin layer of any limpid effusion gives a transparency out of proportion with the small quantity of the liquid, and diminishes to the same extent the mass of the testicular tumor. The transparency, which is the sign, *par excellence*, of hydrocele, may then be deceptive in masking, by the exaggeration of its own extent, a tumor or degeneration of the organ. This is a very curious effect of a small quantity of clear liquid uniformly distributed around an opaque mass. You may give yourselves an idea of it by looking at one of your hands held between you and a bright light; it appears of a general transparency, while nothing indicates the position of those parts impervious to the light, the phalanges and bones. In sarcohydrocele this illusion is extremely apt to mislead. I will relate to you the first example that I ever saw of this fallacious phenomenon. A surgeon of Orleans—one of my cherished pupils, M. Lévêque, whose thigh I was obliged to amputate, and whom science lost twelve years after—sent me the patient. The mother of the man having been successfully operated

on by M. Boyer for a cancer of the breast, naturally had the desire, in which I participated, to have the advice of that able surgeon. M. Boyer examined him, and, deceived by the illusive appearances which I mentioned, decided upon the spot that it was nothing more than a hydrocele, expressing his astonishment that any one should have sent the patient all the way to Paris for so simple an affection. M. Boyer had only been struck by the transparency, the semiological value of which he had done a good deal towards establishing, and not by the antecedents, nor the weight of the tumor. As he was somewhat of a talker with his patients, he said to this one that he was very fortunate in having only a hydrocele, for sarcocoele was almost always reproduced after the operation. Some days after, I was thoroughly convinced that it was a sarcocoele, and so expressed myself. The patient, placed thus between two conflicting opinions, called a consultation, and the cancerous nature of the tumor was recognised. An exploring puncture gave issue to only three spoonsfull of serum. This small quantity of liquid had sufficed to produce this general transparency, by which my venerable master had allowed himself to be imposed upon. Castration was performed, and the patient is living to this day. By an extraordinary chance I operated during the same year for three sarcocoeles, which have not reappeared. If relapse is to be feared in such cases, we should not exaggerate the danger.

In the patient who is the subject of this lecture, there is not the slightest uncertainty. The disease commenced fifteen or twenty months ago; a hydrocele would have attained a greater volume in the same length of time; the size being equal, it would be a little less heavy; the finger, in depressing the parts, arrives upon a solid mass which evidently forms almost the whole of the tumor. A puncture previous to operating moreover will dispel any uncertainty. The cord is healthy, and there is no appreciable lymphatic engorgement in the abdomen. This is, except a light effusion, sarcocoele in all its simplicity. The operation will offer then the same character. In this there is but one peculiarity to watch—that is, the ten-

dency of the mouths of the external pudic to retraction if they are not tied as soon as exposed; and if afterwards one is unable to ligate them, there will be great danger of secondary hemorrhage.

A puncture gave issue to a spoonful or two of serum. The patient was etherized with success. A vertical incision was made in the integuments, the tumor stripped, the cord isolated, seized and divided; a dry cloth was first applied upon the wound without cerate, then some rolls of lint, long compresses, and finally the inguinal bandage. The testicular substance was indurated and scirrhus, and the epididymis offered masses of tuberculous matter.

Thirty years ago, when surgeons did not fully appreciate the assistance that might be derived, in the diagnosis of hydrocele, from the transparency, the affection was very often mistaken and treated accordingly—that is to say, by castration. Pott, of England, and J. L. Petit both frankly confessed this fault, which I myself committed twice at Beaujon hospital in the commencement of my practice.

I remember another example of this mistake, of which a distinguished surgeon was the author, but fortunately failed being the victim. It was the surgeon himself who was affected with a scrotal tumor. He believed it to be a sarcocoele, and, as you may suppose, it made a profound and disheartening impression upon him. What contributed to confirm him in the conviction that his tumor was of a cancerous nature, was the irregular manner of its growth, which had been, so to speak, by jerks, and the sharp pains that he felt or imagined he felt in it. He had diagnosed and operated for more than three hundred hydroceles, and he knew not how to recognise his own. He made up his mind and resigned himself to the operation. He desired that I should perform it. At first sight, before endeavoring to discover the transparency, and notwithstanding the weight of the tumor, I thought of a hydrocele. The transparency was perfect.

This transparency is an admirable sign, and I would that I knew who discovered it, in order that I might return him

thanks for the important service he rendered to humanity. But you must not look upon this as an infallible sign and never deceptive. We have seen, on the contrary, in the case of hydrocele, that in becoming exaggerated by the limpidity of the effusion, it augments to the eye of the observer this effusion, at the expense of the solid part of the tumor, and may thus lead you to take a sarco-hydrocele for a hydrocele. You know, moreover, that the opaque nature of the liquid or the thickness of its coverings may render it completely null; so that its absence does not indicate more surely the absence of hydrocele than its existence does that of the same affection. But these exceptions are so rare, that transparency is one of the best elements of diagnosis possessed by the surgeon.

To return to our patient, I will complete in two words his history, in saying that I could not induce him to believe that he had a simple hydrocele until he saw the liquid escaping by the canula. I threw up the vinous injection, and he recovered and lived many years.

The case on which we are going to operate today in the same manner, is a type of the affection of which it presents all the characters very clearly expressed.

M. Roux, after making two vinous injections, as is his custom, proceeded to speak of

*Venereal Testicle.*—Among the consecutive symptoms of syphilis, one of the most remarkable, without doubt, is the venereal testicle. In the first place, it is one of those which, exceptionally to the rule, is developed in the neighborhood of the seat of the primitive symptoms. The ancients have left us but little concerning this affection, and what still offers the greatest difficulty today is the diagnosis. Nevertheless, we may sometimes recognise it at first sight, as we have done in the patient who is the subject of these reflections. In fact, the tumor has in general a very important exterior character,—which has been signalized by the English, and which I have noticed in my *Voyage à Londres*—which is its pear shape, with the base below, so that the tumor seems to encroach upon the cord or to be continued with it by a kind of stem or stalk. If



this form is not constant, it is very frequent. It is as rare that tubercles and hypertrophy of the testicle affect the two sides, as it is common for syphilitic engorgement to do so. It is equally almost without example that sarcocele is observed simultaneously or successively on the right and left sides. It is the same in cancer of the breast in the female, and I have not seen this manifest itself on both sides more than five or six times. It is a very curious thing that this degeneration does not attack both the organs except in the case of diathesis. For the venereal and cancerous testicle there is an excellent touchstone, which is mercurial frictions; they rapidly cure the one and aggravate the other.

Fifteen years ago, a man from the country presented himself to me with a very voluminous testicle. I diagnosed a sarcocele, and declared the operation to be urgent. Before deciding to submit to it, the patient went to get the advice of another surgeon, and committed the fault of telling him my opinion. This confrere cheered up the patient by telling him that he only had a venereal testicle, which he would promise to cure by mercurial frictions. He tried them; the pain as well as the volume of the tumor was augmented, and in the course of six weeks the sarcocele had become but too incontestible, and it was necessary to perform the operation, the chances of success in which had greatly diminished.

As to our patient, he had three months ago a gonorrhea and chancres, which were badly treated, especially the chancres; and this is the worst of all the venereal symptoms—that which exposes most to consecutive symptoms. The tumor is pyriform, etc.; in a word, the sympathetic nature of the engorgement of the testicle is manifest, and in a little time the mercurial frictions will do justice to it. Professor Roux then went on to speak of

*Superficial Gangrene.*—Four cases of superficial gangrene at the surface of surgical wounds have occurred in our wards within a short time past, which I may as well recall to your minds by a few very brief remarks.

1. A woman whose breast had been removed. The wound

was in full suppuration, when an eschar formed at the surface, to be detached, in almost a single piece, at the end of four or five days, from which time recovery was in nowise retarded.

2. Same accident in another woman who had undergone a similar operation. This one died.

3. A young man had a phlegmon at the groin, following an adenitis, which I opened with the bistoury. Same complication; application of the actual cautery; recovery.

4. The last case is that of a man who had been operated upon for a voluminous sarcocele. After a light chill, the wound assumed a black tint, as if an extremely thin eschar covered its surface. The patient grew no feebler, but the condition of the wound did not amend notwithstanding the treatment pursued. Among the applications to which I had recourse, I will cite the concentrated solution of nitrate of silver, the employment of which was suggested by an ancient *interne* of this hospital, who now practices with distinction in one of the provinces. He recalled to me in his letter a circumstance that I had forgotten, and which you will not regret knowing. In consequence of the removal of one of the tonsils, this physician, then a student, had such abundant and repeated hemorrhages that they inspired serious fears, and demanded the application of ice, and finally of the actual cautery. This is a very rare case; it would perhaps be impossible for me to cite a second example in my practice. Scarcely escaped from the hemorrhage, his life was again endangered, this time by the very means that had saved it, namely, the refrigerants. A pneumonia was developed, which seemed for a time about to carry him off.

This physician writes me that he believes he has found the means of preventing phlebitis and purulent infection from wounds, in cauterizing with the concentrated solution of nitrate of silver; that this caustic, crisping the orifice of the vessels, opposes the absorption of pus. Whatever may be the theory, this new therapeutic agent was presented as resting upon three cases of complete success; and I have tried it, but must declare that, far from being able to praise it, I am ra-

ther induced to think that it augments the gangrenous state of the wound. True, it may have failed in this case, and nevertheless fulfil the indications claimed for it.

Be this as it may, these four patients were etherized. I ask if this superficial gangrene of the wounds, which did not have,—at least, did not appear to me to have—the aspect of hospital gangrene, was altogether independent of the use of the ether? I had made up my mind as regards this question, but still it seemed to merit being considered. This is an accident so exceptional, that it is difficult to admit in its development the intervention of this new agent, now so universally employed, and which moreover will retain its place in the practice of surgery. In extenuation or exculpation of the ether, I may mention to you a singular case of gangrene manifesting itself, without any appreciable cause, in the groin, after an operation for strangulated hernia performed by M. Blandin. Etherization had not been employed, and yet gangrene of the wound arose and progressed to considerable extent. So far, this gangrene, in operations under the influence of ether, has only been observed in the Hotel Dieu.

On the 28th of June, M. Andral read to the Academy of Sciences the following paper

*On the State of the Blood in a Case of Scurvy.*—While Messrs. Becquerel and Rodier were collecting the materials for a memoir which they communicated to the Academy, on the state of the blood in scurvy, I observed at La Charité, in April last, an analogous fact, which also tends to establish, contrary to what has been clearly proved, in more than one case, that scurvy may manifest its existence, by the best marked and gravest symptoms, without the blood showing any alteration, either as to its aspect or the proportion of its fibrine. The case to which I am about to call the attention of the Academy relates to a man sixty-one years of age, who for many years has been progressively growing feebler, and who at the time of his entrance into the hospital present

ed all the symptoms of a scurvy already far advanced. Numerous petechiæ and large ecchymoses were scattered over the members and trunk. Blood flowed almost continually from the nostrils, and it was easily pressed from the gums. The patient, of a waxen yellow hue, was in a state of extreme debility; upon the slightest movement, his respiration became much embarrassed, his heart beat violently, he felt excessively giddy, and was menaced with syncope; he could scarcely take a few steps without being upon the point of losing his consciousness. He had extreme repugnance to aliments, and the little food that he was able to take was very painfully digested. The pulse was ordinarily at 68. One day the patient was found with a hot skin, frequent pulse, dry tongue, and an oppression such that he seemed to be threatened with death from suffocation; he had an almost incessant cough. Auscultation and percussion could be but imperfectly practiced; a strong congestion of the lungs and bronchi was developed, and, seeing the manifest feeble reaction which existed, there was a chance of relieving the patient by drawing from him a little blood. A small bleeding was accordingly practiced, and was followed by a momentary amendment of the symptoms; the respiration especially becoming immediately less embarrassed.

This blood I examined. I was prepared to find it diffuent and dissolved; but, to my great astonishment, it was not so. It was in fact constituted by a small clot, dense and resisting as the clot of the phlegmasiæ; this clot was covered by a perfectly characteristic coat; it was besides of a very small volume, and remained as if suspended in the midst of a great quantity of serum. In its aspect, this blood in no respect resembled that ordinarily taken from scorbutics. It had, on the contrary, the aspect that I have often found in the blood of chlorotics. This aspect is very well explained by the results furnished by the analysis of the blood which was made by M. Favre.

1,000 parts of this blood gave of

Fibrine.....	4.420
Globules.....	44.400
Solid materials of the serum.....	76.554
Water.....	874.626

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1,000.000

This blood, in its composition, resembled that of chlorotics, both in the great diminution of its globules and the large proportion of water that it contained. And yet the patient to whom it belonged had certainly presented other symptoms than those of a simple chlorosis. The petechiæ and the echymoses with which the skin was covered are never met with in this disease; we may even say that nothing is more rare than to observe hemorrhage in chlorotics. As to the fibrine, far from being less abundant than in healthy blood, it was, on the contrary, raised above its physiological mean. This result is totally different from that which was furnished me by the analysis of the blood of another scorbutic, (of which the observation is published in the *Traité d'Hématologie Médicale*), in which I found the globules in almost their normal proportions, and the fibrine, on the contrary, diminished. I have also found very little fibrine (about .001) in the blood of a patient laboring under purpura hemorrhagica.

The fact which I have reported, and which is confirmative of the cases recently communicated to the academy by Messrs. Becquerel and Rodier, demonstrates that the symptoms which ordinarily characterize scurvy, may be produced without necessarily being accompanied by a diminution of the fibrine of the blood. It is not now in this diminution that we must place the proximate cause of scurvy, nor is it any more by it that we may hope to explain many of the symptoms of this disease, and in particular the numerous hemorrhages which constantly coincide with and characterize it.

In this connection, and in many others, perhaps, we may compare scurvy with typhoid fever. In the latter, the fibrine of the blood is in fact very frequently brought below its normal figure, but this is not essential to the existence of the disease. Observation authorizes us merely to lay down



the principle, that in typhoid fever the fibrine diminishes in proportion as the dynamic form of the disease becomes more distinct. This is what also equally occurs in the eruptive fevers, in such a manner that in these various cases the diminution of the fibrine should not be considered as one of the necessary elements of the disease, but only as one of the possible and more or less frequent effects of the cause itself which has created it, and which exercises its influence equally upon the vital forces, which it tends to depress; upon the nervous system, where it gives rise to profound perturbation; and upon the blood, in which it tends to effect an alteration of composition, the reverse of that which occurs in the inflammatory state. The same thing appears to me to transpire in scurvy. Like typhoid fever, scurvy may be developed without the blood having previously degenerated in its fibrine. Consequently, in scurvy as in typhoid fever, the diminution of the fibrine of the blood will be neither a constant nor a necessary alteration; it will be but an effect—a result of anterior morbid modifications—a result which is produced more or less frequently according to the gravity, duration, etc. of the disease. Is it to this diminution of the fibrine of the blood that we should attribute the hemorrhages of scurvy? No doubt that these hemorrhages, which, like those of typhus, multiply and repeat themselves upon a great number of points of the economy, do show themselves especially in the cases where the blood is itself become poorer in fibrine than in the physiological condition.

But these two facts seem to me to have only the simple connection of coincidence. Both, without doubt, are most often produced by the intervention of a common cause; both are the manifestation of the action of this cause. But one of these facts, that of the diminution of the fibrine, does not appear to me to engender the other. The aberration that I have signalized, does it not in fact show us a case of scurvy where remarkable hemorrhages were produced, while the blood had not become poorer in its fibrine? Is it, moreover, very easy to comprehend theoretically how a diminution of quantity oc-

curring in the fibrine of the blood, may induce a flow of this liquid from its vessels? Will it diminish the diameter of the globules, and may they traverse more easily the coats of the vessels? Shall it be admitted that this passage can be favored by an antecedent hyperemia, when after violent distensions of the vessels which are produced in phlegmasial congestion, this effect never occurs, and the globules never under such circumstances escape from their vessels, except in case of rupture of their parietes?

This opinion, revived in our time—one which I myself sustained—which made the hemorrhages of scurvy, like those of the grave fevers, depend upon the state of dissolution of the blood, was especially current at an epoch when it was supposed, that the dissolution of the blood was due to the destruction of its globules. But this destruction, held to exist by Huxham and so many others, is a pure hypothesis. Repeatedly in cases where the blood presented different degrees of this state of dissolution, so often described and so variously interpreted, I have examined this liquid under the microscope, and I always found the globules with their ordinary appearance, and perfectly intact. I have also often examined, in similar circumstances, the blood of hemorrhages, and I have invariably found the globules possessed of their physiological qualities. This being the case, I repeat it, one cannot understand how the simple fact of the diminution of the fibrine could render the escape of the globules from the circulatory channels more easy. From this it must not be concluded that, although there has been a very frequent and remarkable coincidence between the diminution of the fibrine of the blood and the production of hemorrhages, the first of these is the cause of the second, and that they may not exist independently of each other.

In the scorbutic who furnished me these reflections, not only had the blood not lost its fibrine, as in some of the facts cited by Messrs. Becquerel and Rodier, but was elevated in this respect above its physiological standard. In accounting for this, it must not be forgotten that at the moment when vene-

section was practiced, symptoms of acute disease of the respiratory apparatus, with strong febrile action, were observed in our patient. It is to this circumstance that I believe myself able to attribute the existence of almost four and a half parts of fibrine in a thousand of his blood. Besides, a few days after the bleeding was practiced, and apparently by its influence, all febrile movements disappeared; and when, at a later period, we were able to examine the organ, we found no trace of this inflammatory action. While the blood at least two weeks before death had lost none of its fibrine, the spleen was very soft and reduced to a pulp; so that here is a circumstance where an alteration which is more commonly attendant on a state of dissolution of the blood, has shown itself without it. The lungs, which were violently congested, and filled here and there with apoplectic nuclei, presented a striking contrast, by their brown color, to the extreme paleness of the liver and kidneys.

To sum up: This fact proves that a well marked scurvy, already at an advanced stage, can exist without the blood presenting that state of dissolution which is commonly looked upon as attendant upon this disease, and without there being any diminution of the fibrine of the blood. Further observations will serve, perhaps, to account for this exceptional, though not unprecedented fact. From the fact that it is in opposition to the generally admitted opinion, and that it calls for a new examination, I have deemed it important to call the attention of pathologists to it.

Paris, July, 1847.

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LECTURE ON THE DISEASES OF THE GENITAL ORGANS OF THE FEMALE.

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Delivered at Lourcine Hospital, by M. HUGIER.

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*Catarrh of the Uterus.*—The disease of which we propose to speak this morning has been the object of our special attention. After long researches, we think we have arrived at results calculated to clear up certain hitherto obscure points relative to the history of catarrh of the uterus. If we consult the authors who have written upon the subject which occu-

pies us, we find them vague, and not unfrequently guilty of errors which are not in all instances without importance. For example, catarrh of the uterus is generally regarded as the consequence of an acute or chronic inflammation—an affection of the internal membrane of this organ—and to this affection various species of discharges are often attributed, when in reality they have an entirely different origin. In our opinion, the word catarrh is not applicable to a disease of the lining membrane of the body of the uterus, but is clearly and distinctly an affection seated in certain points of the neck, or, in other words, in the follicles of this organ. We consider the discharge proper to catarrh of the uterus a peculiar liquid, very distinct from other kinds of discharges. This liquid is thready, thick, viscid, consistent, of an albuminous or vitreous aspect, and endowed with alkaline properties.

Before entering directly into our subject, allow us to offer you some considerations upon the various discharges which proceed from the genital organs of the female. These preliminaries will be of service to you; they will aid you in understanding the history of uterine catarrh, and will especially render more easy of appreciation the characters which are proper to discharges symptomatic of this affection; for there are many discharges which have been frequently regarded as belonging to catarrh which are entirely foreign to it, and which are vaguely designated under the names of fluor albus, leucorrhœa, blennorrhagia, etc. This want of exactness, this confusion in language, is not without inconvenience; it denotes a defect of observation injurious in its therapeutical consequences. In order properly to appreciate the value of discharges in general, we will examine them one by one as regards their seat, and to do so we will divide them as follows:

1. *Vulvar discharges.*—These proceed from the mucous membrane of the major and minor labia, clitoris, and constrictor vaginæ. The liquid which constitutes them may be more or less abundant, thick or aqueous, white or greenish white, mucous or purulent; it is ordinarily acid. This kind of discharge arises either from a local inflammatory or atonic state, simple or blennorrhagic.

2. To these discharges we will add those which are the product of the secretion of the vulvo-vaginal glands, and which may be more or less abundant, simply mucous or purulent; but in these various cases the liquids never offer the properties which characterize the discharges of uterine catarrh.

3. *Urethral discharges.*—A simple or specific urethritis may furnish, by the orifice of the urethra, a more or less copious, thick, mucous, purulent, or muco-purulent discharge, but never similar to the liquid secreted by the follicular apparatus of the cervix uteri.

4. *Vaginal discharges.*—The same remark is applicable to the fluids secreted by the mucous membrane of the vagina. In fact, the vaginal discharges—the nature of which varies in other respects, and which recognise as their cause an inflammatory or virulent affection, or even an atonic state of the vagina, as that which obtains in veritable leucorrhœa—these discharges, we say, never present that transparent albuminous aspect, that viscid, thready, elastic character, and, finally, that alkaline property, which we constantly find in catarrh of the uterus. It may indeed happen that these vaginal discharges may offer characters similar to those possessed by the liquids of catarrh; but in this case it arises from a mixture of two liquids, the one coming from the mucous membrane of the vagina, the other from the seat of the affection which occupies us, that is to say, from the follicles of the cervix; so that if it were possible to separate the different products, we should find the characters proper to each; consequently it follows that this is but a coincidence or complication of two affections, which are not, however, the less distinct the one from the other.

5. *Uterine discharges.*—We are now arrived at the essential point of the question. It does not suffice to have studied the discharges which do not arise from the uterus in order to believe that we now only have to do with those that are proper to uterine catarrh; for this is knowledge which does not furnish all the elements necessary to our diagnosis. We must push our investigations still farther, and in doing this we will establish an important distinction between that which con-



cerns the uterus, and the products of secretion.

We must consider the uterus as divided into two parts, the neck and body. This distinction, besides being true as regards its configuration taken as a whole, is not the less true as regards its anatomical structure; with this difference, as we will see further on, the existence of distinct physiological and pathological phenomena of great importance. In fact, the body and neck of the uterus are distinct in their functions and diseases, the liquids secreted by the neck differing from those which are produced by the internal membrane of the body. It is not this which offers the anatomical seat of the discharge which constitutes uterine catarrh, while it is the neck which is the secreting organ of this fluid.

Let us now carefully study the anatomical and physiological differences which distinguish the two constituent parts of the organ of gestation, in order more satisfactorily to appreciate the pathological phenomena.

The surface of the neck offers numerous folds, which are intended to facilitate its dilatation during labor; the internal surface of the body is, on the contrary, smooth, polished, and in nowise wrinkled. When this organ, as obtains in pregnancy, augments in volume, its expansion is neither instantaneous nor on the other hand passive; it is effected in consequence of a movement of general nutrition, gradually and insensibly.

If we examine the interior of the cavity of the neck, we ordinarily find a variable quantity of mucous matter, transparent, viscid, and thready between the fingers. The cavity of the body offers nothing similar; the liquid which it may contain is more or less thick and serous, never resembling that of the neck. It is in the cavity of this organ, and upon certain points of the surface of the vagina, that we often perceive a number of mucous follicles, called *glandulæ nabothi*, shut follicles, charged with secreting the thick, thready, gelatinous mucus of which we have just spoken. But these little glandular bodies never show themselves in the cavity of the body; and even if placed there, what end could they serve? Would not their presence be useless, or even hurtful? Would not the

follicular liquid secreted by them in the cavity of the body often offer an obstacle to fecundation? and would it not favor the escape of the ovum, and render its exit easy? Placed, on the contrary, in the cavity of the neck, secreted, perhaps, more abundantly after the act of conception, the follicular mucus obstructing and obliterating the cavity of the neck, facilitates the engrafting of the ovum, which is thus prevented from passing out. The obliteration in the mode of which we are speaking may take place to such an extent as to prove, in certain cases, a true cause of sterility, by opposing itself to the penetration of the spermatic fluid during the act of copulation.

The follicular liquid shows itself useful again during labor. In moistening the cavity of the neck, it favors its dilatation, facilitates the passage of the head of the child, and consequently renders the woman less liable to those more or less serious lacerations to which she is sometimes exposed. But whatever may be the physiological value of the liquid and of the follicular organ, it is certain that the secretory apparatus of which we have spoken exists only in the neck; in our numerous researches we have never been able to detect its presence in the cavity of the uterus. Without doubt, products of secretion do exist in this cavity, but these products, whatever they may be, always differ from the liquids furnished by the follicles of the neck. One does not see, we repeat it, upon the internal membrane of the body of the uterus anything similar to the mucous follicles presented by the neck. The small glandlike bodies that are found there are nothing more than ramifying submucous canals, and the glands pointed out by Weber are themselves but the products of the *membrana decidua*, and consequently do not properly belong to the uterus. In fact, what is the internal membrane of this organ? What is the general opinion of anatomists concerning it? Now, it is evident that if the greater part of them contest the existence of a mucous membrane lining the cavity of the uterus, they do not hesitate to admit it for the cavity of the neck; such is the opinion of Heister, Méry, Azaguidi, Morgagni, Ribes, Chaussier, Dugès, and Madame Boivin, whose

works and manner of viewing the question are of great value. These authors assimilate the uterine membrane to the serous membrane of the heart, and do not recognise a mucous membrane except upon the point of insertion of the placenta. P. Dubois and Cruveilhier, it is true, believe in the existence of a true mucous uterine membrane; but we must observe that these authors base their opinion only upon analogies, and in no instance upon anatomical demonstration. For ourselves, we will say, relative to the question, that the cavity of the body of the uterus is lined by a mucous membrane, but that this membrane does not exist except in a rudimentary state, while the internal membrane of the neck offers all the elements which characterize a complete mucous membrane.

The same anatomists that we have mentioned, Nabothi himself, and, very recently, Martin-Saint-Ange and Grimaud, describing the follicles in question, recognise their existence only in the neck, never having seen them elsewhere. Certain special observations come still to the support of this view. It is thus that Morgagni, Dugès and Madame Boivin and many other anatomists, having had occasion to examine the uterus in women who died during the period of menstruation, have signalized as very sensible, and more or less voluminous, the follicular bodies of which we speak; but they have remarked their existence only in the neck, never in the body.

These, now, are circumstances which would have revealed similar follicles in the cavity of the body if they had really existed there. Moreover, the liquid secreted by the internal membrane of the uterus, which constitutes what is sometimes called the false waters, resembles in appearance peritoneal serum, but is never thick, thready, albuminous—in a word, similar to the mucus secreted by the follicles. The same remark is applicable to the nature of the purely aqueous liquids that we see discharged in an intermittent manner in certain cases of insertion of the placenta into the neck. If we examine, moreover, that which occurs in obliteration of the cavity of the uterine neck, the observation again confirms our opinion. In effect, when it is the inferior orifice which is obliterated, we find in the uterine cavity an aqueous liquid mixed

with another fluid which is mucous, thready, transparent. On the contrary, in cases of obliteration of the superior orifice, no similar mixture is found; the liquid which exists then in the cavity of the body preserves its ordinary characters; it is aqueous, serous, never viscid, thready or albuminous, and in no respect resembles the fluid contained in the neck. We will add, that whatever may be the lesions of the uterus, the cavity of this organ has never shown us liquids analogous to those which result from the secretion of the follicles, and of the characters of which you may gain an extremely good idea from those patients laboring under catarrh of the uterus, which we shall show you after our lecture.

To terminate our rapid glance at the various secretions furnished by the genital organs of the female, which you must not confound with the discharge proper to the disease which occupies us, we should mention the secretion from the internal membrane of the uterus—discharges symptomatic of various affections of this organ; we should indicate, finally, the liquids secreted by the appendages of the uterus, the Fallopian tubes, attendant upon the numerous affections of which these organs are susceptible, hypersecretion, dropsies, cysts, etc. But in these various cases the discharges differ essentially from the products of the secretion of the follicles of the neck, and cannot be confounded with them.

To recapitulate: the genital organs of the female give place to discharges which, viewed as regards their seat, may be divided as follows: 1st, vulvar discharges; 2d, discharges coming from the vulvo-vaginal secretory apparatus; 3d, urethral; 4th, vaginal; 5th, uterine, which may themselves be subdivided into those which proceed from the neck, and those which are furnished by the body; and, 6th, discharges originating in the appendages to the uterus. Now, of all these various discharges, those only belong to the affection designated *catarrh of the uterus* which offer the characters that we have indicated, and which are seated solely in the follicular apparatus of the neck. It is then the neck—its follicles—that we should regard as the true seat of the disease which now engages us.

The different considerations which we have presented will assist you in understanding certain points relative to the history of the disease, so that we may now say something of its etiology. Catarrh of the uterus is observed principally in young women who abuse sexual pleasures, in those of a lymphatic temperament, with soft red hair, or in those who have no other mark of the *brune* than the color of their hair. Cold and moist climates also predispose to this affection. Masturbation, excessive coition and pregnancy are not without influence in the production of uterine catarrh; but it sometimes happens, when it depends upon pregnancy, that it disappears after delivery, and is consequently but a transient affection. There are besides many diseases that should be regarded as predisposing causes, and especially slow, chronic inflammation of the uterus, which determines in this organ irritative fluxionary movements, and consequently a hypersecretion of the follicular apparatus.

Certain vices of the humors—a scrofulous affection, for example—being capable of deteriorating the female economy—of developing in it a sort of mucous constitution—may create and sustain a catarrh to which the name of scrofulous catarrh might be given. We will make the same remark of blennorrhagic and syphilitic diseases, the morbid product of which may have attained the follicles of the neck, and there given rise to a virulent catarrhal hypersecretion. It sometimes occurs, in cases of this nature, that the specific cause being removed, the catarrhal affection dependent upon it also disappears, though this, on the other hand, may continue after the removal of the cause. The etiological causes which we have just enumerated being established, we will return again to the product of the secretion of the follicular apparatus—a product whose importance we should bear in mind, as being the essential element of the disease.

The follicles which furnish the liquid proper to catarrh of the uterus are seated, as we have already remarked, at the neck. In the cavity of this part of the organ they are less numerous towards its orifice than upon its middle portion;



they are also found disseminated on the extra-uterine surface of the cervix, and these consequently being, like the first, susceptible of disease, may in this case give rise to a form of catarrh which might very properly be designated by the term of extra-uterine catarrh. Of these follicles, some are superficial, that is to say, placed under the mucous membrane, while others are deep, situated in the substance even of the walls of the neck, at a line and even two lines in depth in the proper tissue of the uterus. The glandular corpuscles of which we have spoken, irritated and inflamed, have often been described under the vague name of granular metritis, without the writers knowing to what anatomical lesion it was to be attributed.

Let us now establish an important distinction between the normal or physiological, and the pathological products of these follicles. We will first remark, that there exists in them normally a certain quantity of mucus, secreted by the follicles in the cavity of the neck; but in the physiological condition of the organ, the mucus is always transparent, resembling very much a vitreous body. When this liquid is secreted a little more abundantly than ordinary, it may escape by the vagina, and cause certain women to think that they are laboring under fluor albus. In cases of this sort there exists but a simple hypersecretion of the follicles, that is, a state bordering upon catarrh properly so called. It manifests itself without redness, inflammation or tumefaction of the neck of the uterus; it is met with principally in women who have had several children, or in those whose uterus has become the seat of an active hyperæmia. To establish, then, the existence of a catarrh, it is not only necessary that there be an augmentation in the liquid secreted, but also that it present either an opaque, a dull white, or a purulent aspect. This is its differential character.

Let us now examine this morbid product as regards its contagious properties:

1. *Physical Characters.*—The liquid may be observed at the vulva, in the vagina, and at the neck. When examined at the vulva, we see at its orifice a flake of thick, elastic, thready matter, which is detached with difficulty, unctuous to

the touch, and therefore slightly sensible to the finger. In some cases the neck seems swollen, dilated like a bubble. To the touch the neck appears then supple and pulpy, as if it were softened; and if you attempt by the aid of the forceps to evacuate the liquid, it becomes detached and flows in greater abundance than you would have believed, and, the walls of the neck collapsing, it appears to be emptied. When you apply the speculum—and this is useful—you must use that with two valves, by means of which, after having placed it properly and seized the neck between the two gutters formed by the valves of the instrument, you may make repeated pressure, and cause to flow abundantly, and almost in a jet, the liquid contained in the cavity of the organ and in the sacs of the mucous follicles. The quantity of the mucus contained in the neck may be considerable, and may give rise to what M. Jobert calls dropsy of the neck, which in our opinion is but a form of catarrh. In effect, the liquid is simply accumulated in the cavity of the neck, and not contained in a closed and distinct sac.

In certain cases, the mucus secreted by the follicles of the cavity of the uterus is in communication with the liquid of the same nature furnished by the follicles situated on the surface of this organ which is in contact with the vaginal walls, and gives rise to more or less considerable masses of fluid. Whatever may be the point of the vagina where this deposit takes place, it is easy to see that the matter which constitutes it is not the product of the mucous membrane of the vagina, but rather of the glandular apparatus of which we have spoken. In fact, we always find a stream of liquid which is directed towards the neck, the place of its origin; and it is thus that the mass of the liquid has glided to the vulvar opening. It sometimes happens that, in consequence simply of the vertical position, the mass of liquid becomes suddenly detached and falls to the ground. It is not in this way that the discharges in disorders of a different character are effected; in these, the escape of the fluid is never in a body or mass, but slowly, and drop by drop.

Let us now say something on the appearance presented by the mucus of uterine catarrh deposited upon the linen. The stains which this liquid forms upon the linen are quite round, and not angular as is the case in those formed by discharges from the vagina; they glue the linen, rendering it firm as if starched; their color is a dull white, grayish, or greenish yellow. It is important to be able clearly to distinguish these taches or spots. In the first place, it may be of some importance in a medico-legal investigation; then it may happen that you will meet with certain women who will not allow any examination whatever of their genital organs, and you are thus obliged to put up with an examination of their linen; and these, too, are difficulties which you must expect to meet but too often in practice.

2. *Chemical Characters*.—If we look for a moment at the chemical properties of the liquid of which we are speaking, we shall see that it offers characters peculiar to itself. This liquid, in fact, is alkaline; it may sometimes show itself acid, but this is then owing to its mixture with the products of a secretion of a different nature and source; so that if it were possible to separate and analyze apart the liquids mixed together, that dependent upon catarrh of the uterus would always present an alkaline character. When you collect and set aside this liquid to dry, it becomes solid, brittle, elastic; put it in water, where it does not dissolve, it regains all the characters by which it was recognised in the liquid state. The matter of discharges from the genital organs, other than that belonging to catarrh, does not present the same chemical and physical characters as the latter. Thus we find among them some differential characters which are of no mean value.

3. *Contagious Properties*.—We proceed to add to the foregoing some brief considerations upon the contagious properties of the liquid produced by uterine catarrh, which is a question not altogether devoid of interest. Catarrh of the uterus is evidently contagious when the consequence of or when accompanied by, a syphilitic disease; it may be contagious when it is simply blennorrhagic, without being syphilitic. When blen-

norrhagic catarrh has continued a certain length of time, it may lose its contagious properties, as you are aware, in urethral blennorrhagia.

A urethritis in a man may be the consequence of sexual connection with a woman laboring under a simple non-blennorrhagic catarrh. It is not very rare to see in the same woman a catarrh showing itself contagious at certain times, and not constantly. This may be owing to certain transient modifications produced in the matter of the discharges in certain women placed accidentally in diverse conditions, and inappreciable circumstances. It is thus that excess in coition, menstruation, fatigue, and other causes, may develop a principle of acidity in the product of the catarrhal secretion, and give to it contagious properties; these transient causes subsiding, the effects subside also, and the woman becomes exempt from all contagious qualities. Nor is it unexampled for women, laboring under uterine catarrh, to fail to communicate disease to the men with whom they have habitual intercourse, and yet produce a blennorrhagia in those who have had with them but occasional connections. It is important to be aware of facts such as these; their explanation is perhaps difficult, but their existence is not the less incontrovertible, and this should suffice us.

*March and Duration.*—Catarrh of the uterus maintains a continued march; no intermissions mark its progress. Nevertheless menstruation exercises an appreciable influence upon this affection. In effect, two or three days before the menses appear, the catarrh is often seen to diminish, then to be suspended, and suppressed during their continuance, to reappear after their cessation, and resume its continued march; it acquires sometimes a greater intensity after the menses, though this is but a momentary result.

Catarrh of the uterus may present itself under two forms—acute and chronic. In the first case, it may terminate at the end of a month or a month and a half. But the chronic form is the most frequent, and the disease then may last for many months or years, and even during the whole of the period of

life in which the woman is susceptible of fecundation, it rarely continuing after the final cessation of the menstrual discharge.

*Symptoms.*—When the catarrh is chronic, essential, and not complicated, it gives rise only to unimportant functional troubles. There is remarked a vague general uneasiness, some sensations of twitching in the groin, in the vagina, in the interior of the womb; sometimes indigestion; a little loathing, sadness, etc.; and some complications may also occur. Thus there exists sometimes an inflammatory condition of the parts, of the neck itself, the surface of which may be red, bleeding, and deprived of epithelium, and flabby and fungous around the follicles. The orifice of these follicles may be enlarged and ulcerated. The reactional troubles will be more or less marked according to the complications, they being in fact in a ratio with the nature and degree of intensity of the phenomena of complication.

*Diagnosis.*—We have seen what are the characters proper to discharges of catarrh of the uterus; we find these the essential element of the diagnosis of the affection. But you must not neglect to inquire if the disease is simple; if it is owing to a local or general cause; if it is connected or not with an affection of the tissue of the neck or of the body of the uterus; if it is the consequence of a lymphatic temperament, of an anemic state, of a scrofulous taint, etc.—circumstances all calculated to furnish essential therapeutic indications.

*Acute Pleurisy. Thoracentesis.*—Although acute pleurisy is not ordinarily an extremely grave disease, there are cases where the termination is fatal. Respecting these terminations M. Trousseau has the following interesting remarks:

1. Acute pleurisy may kill by the excess of effused liquid.
2. It may kill as a phlegmasia, independently of the quantity of the effusion.
3. In the same individual there may be an excess of effusion capable of killing independently of the reactional influence of the phlegmasia, and a phlegmasia capable of producing death independently of the excess of effusion.



Struck with the manner in which acute pleurisy may become fatal in the first category, M. Trousseau demanded if, in these circumstances, it would not be possible to evacuate the liquid by means of a surgical operation, as is sometimes done in chronic pleurisy. In 1843 he acted upon this thought, and had the good fortune to succeed. In 1844 he twice repeated the operation; in 1845 he again performed it; and in a memoir published in the *Journal de Médecine*, he has based upon the three propositions above given the three following therapeutic conclusions: 1. In the first case, paracentesis of the thorax is a powerful means, exempt from danger. 2. In the second case, thoracentesis is at least hurtful. 3. In the third, it is useful, as it certainly prolongs life, and thus opens up some chance to the patient.

M. Trousseau, we see in this, does not recommend thoracentesis as a common operation, to be performed daily, like venesection, cupping and blistering, but as an exceptional method which is only applicable in certain rare cases. This operation of thoracentesis in a case of acute pleurisy was performed by M. Cullerier a few weeks ago in one of the wards at the Hotel Dieu, in which I was taking one of my private courses. A recapitulation of the case may be interesting:

A short time since a man forty-three years of age entered the hospital, laboring under a simple acute pleurisy. A bleeding at the arm and two blisters effected a notable amelioration of the symptoms and considerable diminution of the effusion. Suddenly, without any known cause—probably in consequence of some imprudence of the patient—the inflammation appeared with increased intensity; the chest filled anew; stitch in the side, and intense febrile action. Cups were applied, followed by four successive vesicatories, and purgatives. Notwithstanding these energetic means, the effusion, far from diminishing, seemed to augment; the dyspnoea was greater; the fever alone had abated. The patient, although he had here evidently been attacked with an acute inflammation of the pleura, was, as far as his general condition was concerned, in the same state as if he had been attacked with chronic

pleurisy. He was in the following condition when the operation was performed: The right side was enormously dilated; in the inferior half of the chest there was œdema of the soft parts of the walls of the thorax; dullness throughout the whole of the right side. The liver was manifestly pushed back into the iliac fossa, and percussion gave an obscure sound until about two inches above the crural arch. Slight œdema of the right thigh; extreme dyspnœa; respiration very rapid; scarcely any febrile movement.

M. Cullerier commenced the operation by making with a bistoury an oblique incision of the skin, which comprehended also the muscles, from above downwards and from behind forwards, in the direction of the intercostal space, between the eighth and ninth ribs. Arrived upon the pleura, the surgeon penetrated into the thoracic cavity with a trocar, introduced at the inferior angle of the wound. The first quart of liquid evacuated consisted of a yellowish serum, a little turbid, resembling in color urine slightly changed. The patient having now changed his position, the liquid which flowed by the canula changed its nature, and of ten pounds, which was about the amount of the effused fluid, three-quarters at least were composed of almost pure pus. The operation was barely completed when the liver returned to its normal position. The day of the operation and during the whole of the next, pus escaped by the opening made in the walls of the thorax. M. Cullerier carefully introduced, on the second day, a sound into the wound; this maneuver gave issue to more than a quart of sero-purulent liquid. A blister was applied upon the diseased side, with the view of creating an obstacle to the production of any new serum. It is now eight days since the operation, and, save a slight access of fever that arose on the fourth day, everything has gone on well.

It is evident that thoracentesis must remain an exceptional method, and that its indications are in nowise so common as those of the other means that are daily employed against acute pleurisy. M. Trousseau has expressed, in a few lines, the indications which warrant it: "When the dullness shall

be perceived in front and above, and shall have attained the median line from the sternal curve to the fourth rib, and the diaphragm shall have attained its greatest degree of depression, it will be desirable to make the puncture, although there may be no urgent necessity. But if, notwithstanding the activity of the means employed, the dullness shall pass beyond the median line, and continues each day to extend towards the opposite side to the extent of four or five millimetres, there is urgent necessity for puncture; and it is still more pressing if the effusion is on the left side. And when the effusion has not passed the median line, if the orthopnœa is extreme, the pulse small and very frequent, the face excessively anxious, especially if there is a tendency to lypothymia, it is also necessary to operate as soon as possible."

An opinion generally accredited among physicians is, that the pneumonia which supervenes during the course of pulmonary phthisis is always or almost always mortal. What has probably contributed to extend this opinion is, that in a great number of persons who have died of phthisis, there are found at the autopsy some equivocal traces of acute inflammation of the pulmonary parenchyma. But a distinction should be established between the pneumonia which supervenes in the last period of pulmonary phthisis, and that which is observed often during the first periods of the evolution of tubercles. And in this last case, it is still necessary to distinguish between the tuberculous pneumonia of the child and that of the adult. In the child it is always mortal; already very grave in itself, the pneumonia seems to be a spur which imparts a more rapid march to tuberculization. In a very little time, the symptoms become intensely acute, and death occurs almost immediately. In the adult, it is far from being the same. The phlegmasia of the pulmonary parenchyma is quite common at an early period of the tuberculous disease; and in this case it is remarkable that it possesses but little gravity, and that it most frequently terminates in a favorable manner. Extraordinary as it may appear, the fact is not the less certain, the observations of Louis, Andral and Grisolle having put it beyond a

doubt. The last named gentleman, who has published the most complete treatise on pneumonia extant, has proved, moreover, that the pneumonia which supervenes at an early period of phthisis does not appear to aggravate, at least as a general rule, the first disease—a proposition which M. Louis, since the publication of his work on phthisis, has recognised as correct. Most physicians have had more than one opportunity of verifying the almost perfect harmlessness, or at least comparatively slight gravity, of pneumonia supervening among subjects manifestly attacked with tubercles in a slightly advanced state. A few days since there was a case of this kind in the wards of M. Louis at the Hotel Dieu. The explanation which he gives of this fact, at first apparently so strange, is, that the pneumonia which supervenes in these circumstances is in some degree analogous to traumatic pneumonia, of comparatively mild nature, as we know; and that tubercles in this case simply act the part of a foreign body.

Paris, July, 1847.

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*Notes on Medical Matters and Medical Men in Paris.* By DAVID W. YANDELL, M.D., of Louisville, Ky.

There are few wards in Paris that offer more instructive cases to the student than those of M. Jobert, at Saint Louis. The following is one which he treated not long since. The case was one of *spontaneous gangrene* occupying the left foot of a man aged thirty-nine years, a painter by occupation. Here, as is almost always the fact, the cause of the disease remains unknown. It is true, as we shall see further along, that an arteritis had preceded the appearance of the gangrene; but the difficulty is not thus removed, and, besides, nothing reveals under what influence the arteries of the leg became inflamed. In fact, remarked M. J., our patient is of a very good constitution; he has never committed excesses of any kind, and he assures us that no mechanical violence was concerned in the production of the disease. It is now seven years since he

commenced to feel in the leg pains which appeared at intervals for four years, when they became continued, and augmented in intensity; in the last two years he has remarked that his leg, while the whole of it became cold, diminished in volume. Finally, about six weeks since, the foot blackened, and the skin which enveloped it became covered with numerous phlyctænæ. At the time of the operation, you will remark the following condition of things: blackish tint of the toes, upon which the skin is dry and horn like; coloration of the same nature on the back of the foot, with this difference, that the gangrene there is moist rather than dry; in front of the tibio-tarsal articulation a large eschar, with a greyish black base, and the discharge of an ichorous liquid, testifies the presence of a recent mortification of the skin of this region. A little above this wound, the skin is red around the whole circumference of the leg, and this redness, which terminates abruptly, has remained stationary for some days, indicating that the gangrene is not in a stage of progression. Except the discoloration, the dermis is in all respects in a state of integrity. The patient was carried to the amphitheatre, and after inhaling the vapors of ether for some minutes, M. Jobert removed his leg according to the flap method, at the middle third. The arteries furnished very little blood, and the operator remarked that the blood was blacker than in the normal state, and that, consequently, there had been a commencement of asphyxia. The patient, who at the moment of the division of the skin had moved suddenly, preserved no recollection of the pain. It was easily to be seen, after the lapse of a few days, that not only re-union by first intention would not be effected, but that, unfortunately, the gangrene continued its ascending march; soon, in fact, the soft parts fell in eschars and the denuded bones projected beyond them. A continued febrile action, delirium, general debility, and the appearance of a large gangrenous eschar upon the sacrum, announced a speedily fatal termination, and death occurred on the twelfth day after the operation.

The foot and the inferior part of the leg having been dis-



sected, M. Jobert pointed out the obliteration of the tibial arteries, which bore traces of a recent inflammation.

*M. Jobert's Method of Treating Fractures.* For the last fourteen years, M. Jobert has treated fractures of the leg, I may say, without the bandage. It would be strange indeed if a man of his intelligence, who in more than one respect is in advance of his countrymen, should persist in any plan of treatment, for so many years, if it was not at least equal, and on some accounts superior, to the more common, and, as I might say, more orthodox systems. Placing the fractured member upon a cushion, he embraces the foot with a simple bandage, in the form of a stirrup, the ends of which serve to effect extension, which is afterwards rendered permanent by their being firmly attached to the foot of the bed. Counter-extension is practised by means of a towel, the centre of which is placed upon the pelvis, and the two extremities fastened to the head of the bed. In this way the limb is ready for the application of topical remedies if rendered necessary, either by a wound of the integuments, a phlegmon, or any other affection. This, however, according to Jobert, is not the only advantage of this method of treatment. The fractured limb, not being submitted to any compression, its circulation is performed as in the normal state; and certainly it cannot be denied that this is a condition in every way favorable to the prompt formation of the callus. Moreover, in the leg, the muscular powers act but little, and a feeble force is sufficient to maintain the osseous fragments in a position suitable for obtaining a consolidation without shortening.

I do not propose to compare this mode of treatment of fractures of the leg with those employed by other surgeons. It is at any rate simple, and any one who will follow M. Jobert in his visits will see, among probably the largest number of fractures that are to be found in any service in Paris, the most perfect and beautiful cures of this class of accidents effected by a strip of bandage and a towel.

*Burns.* Dupuytren laid down six degrees of burns, according to their intensity, a division than which there is probably not a better. His classification was the following: 1st, superficial inflammation of the skin without phlyctens; 2d, inflammation with phlyctens; 3d, disorganization of a portion of the papillæ of the skin; 4th, the dermis reduced to eschar; 5th, combustion of the tissues to the bone; 6th, carbonization of the whole of a member. M. Jobert is in the habit of treating burns by the application of bladders filled with ice, the part being previously covered by a compress with holes punched in it and a large anodyne of cerate spread upon it. M. J. is of opinion that recovery is more promptly obtained in this way. On this subject I do not pronounce an opinion, but there is no doubt that the pain, which is the principal feature in burns of the skin, is relieved in an astonishing degree from the first hour of the application of the ice.

The following cases treated a short time since by M. M. Jobert and Malgaigne, in the wards of St. Louis, afford an illustration of their modes of treatment:

In consequence of the explosion of a steam boiler, sixteen men, who were occupied around it, were burned and otherwise injured, four of whom died immediately; the remaining twelve were carried to St. Louis, nine into the wards of Malgaigne, three into those of Jobert. The treatment of these two surgeons being different, I will briefly notice the condition and management of the whole, commencing with the nine in Malgaigne's ward.

CASE I.—*Wound of the Head, with loss of substance of the Bone and Encephalon.—Death.* In bed No. 30 was placed a man named Bernard æt. twenty-one years. His body and extremities were covered with contusions and burns; the superior part of his head presented a vast wound with loss of substance of the bones and encephalon. Besides this, the skin was cold; pulse extremely feeble, scarcely perceptible; complete loss of sensibility and consciousness; stertorous respiration. Malgaigne, after carefully examining the unfortunate man declared that there was no chance of his recovery. This was

at eleven o'clock, A. M.; at half-past one o'clock, P. M., he died.

CASE II.—*Grave Burn of the Face, Trunk, and Superior Extremities.* The patient, a man twenty-three years old, presented a deep burn of the whole right half of the face, the forearms and the hands, and of the right side of the chest. He suffered the most distressing pains. Pulse 112, small, hardly perceptible. On the day of his entry a very abundant discharge of blood occurred from the auditory channel of the right side, which ceased the following day. Malgaigne prescribed on the 7th (the day of entry) an infusion of tilia (*tilia Europea*), and on the 8th a honied injection. (*Lavement miellé.*) The burns were dressed with the lime liniment and cotton batting. Five days elapsed, and although the patient had outlived the pain, there was one of the burns which created the greatest anxiety, in view of the reaction which precedes the fall of the eschars and the suppuration which necessarily accompanies it. On the 11th the work of elimination commenced. The pulse was very hard and frequent, 120; skin hot; thirst intense. The patient frequently endeavored to get up from bed, and was obliged to be constantly watched. At one o'clock, A. M., on the 12th, he died.

CASE III.—*Burns of the Trunk and Members; Wounds of the Face and Scalp.* Joseph Chopin, æt. twenty-five years, offered a burn of the chest, thighs and right arm, wounds upon the scalp, nose and right eye-lid which presents considerable ecchymosis. Malgaigne prescribed the infusion of tilia for tisane, and dressing with the lime liniment and cotton. At the evening visit, the pulse which in the morning was feeble and at 64, regained its force and frequency, 92. The interne took about twelve ounces of blood from the patient's arm. On the 8th, Malgaigne, finding the pulse as frequent though less strong, did not repeat the bleeding. But on the 10th, the pulse having again augmented in force and frequency, the patient was bled both in the morning and evening. On the 11th, the patient was in almost the same condition, no accident having yet supervened. On the 13th, an intense

erysipelas was developed on the face and scalp, and at ten o'clock, P. M., on the 15th, he died.

CASE IV.—*Burn of the Buttock and the Right Superior Extremity.—Contusions of the Face.* Renard, æt. fifty-six years, presented a very deep burn about the size of the hand, on the right buttock, also another situated on the right arm about the humero-cubital articulation. There were also contusions upon the face. In the morning the expression of the patient's face was somewhat stupified; his pulse small and at 112. During the day the pulse returned to almost the normal condition at 64 pulsations, but in the evening it regained in force and frequency; it was then 84. Venesection. On the 8th, the patient said he had slept the night previous; he then appeared a little drowsy, was pretty well and asked for something to eat. Skin moist, pulse 80. Ordered sugared gum; some dressing, broths and soups. On the 11th, the patient complained of pain from his burn on the buttock only when lying upon his back, and again asked for something to eat.

CASE V.—*Contusion of the Head and of the Right Leg.* Victor, aged seventeen years, who had been more scared than hurt, only offered some slight contusion on his head and right leg. On the next day, being able to go about, he quit the hospital.

CASE VI.—*Burn of the Right Buttock.—Wounds of the Head and Right Thigh.* Joseph, æt. twenty-six years, presented on the right buttock a superficial burn not larger than the hand, and on the scalp a small wound without denudation of the bones. A wound that was not at all serious was observed also upon the right thigh. The evening of the day of the accident the patient's skin being hot, pulse hard and frequent, the interne bled him. On the 8th, Malgaigne ordered the wound to be dressed with the oleo-calcarious liniment and carded cotton. The pulse, although still frequent, (112) had lost the force which it possessed the preceding day, which circumstance induced M. not to prescribe another bleeding. In other respects the condition of the patient was so satisfactory that Malgaigne did not hesitate to give him broths. The

following day no accident supervened. On the 10th, the patient was able to eat a portion of solid food, and on the 11th he was allowed two. On the 16th, no complication has yet occurred; the wound of the thigh suppurates a good deal, and there exists a circumscribed swelling and pain around it.

CASE VII.—*Contusions of the Inferior Members.—Wounds of the Head and Right Hand.* Betzeze, æt. twenty-five years, who was one of those who escaped the most fortunately, presented only two wounds, neither of which was serious, the one superficial and of small extent, situated on the scalp, the other on the right hand. Some traces of contusions are to be seen on the inferior extremities. There did not supervene in this case any reaction, nor any of those accidents which are so often observed in consequence of wounds of the head. On the 11th, the patient eat two portions of aliment, and walked in the garden. On the 16th, Malgaigne signed his *exeat*.

CASE VIII.—*Wound of the Head.—Deep Burn of both Buttocks, and of the Left Leg.* Rolland was standing beside case No. 2 when the boiler burst, and although he suffered considerably, he was less mutilated than his neighbor; he presented nevertheless a deep burn of both buttocks, and two wounds, the one on the head and the other on the neck. The superior right eye-lid was the seat of a very considerable sanguine effusion. On the 8th, notwithstanding these lesions, Malgaigne found the patient in a state sufficiently satisfactory to warrant him in allowing him to take two soups. The burns were dressed with the oleo-calcarious liniment and the wound covered with simple dressings. On the 11th, no complication had supervened, and the patient eat a portion of aliment. On the 16th, the eschars commenced to detach themselves, and the suppuration was very abundant. Nevertheless the general condition of the patient was very satisfactory; he eat two portions.

CASE IX.—*Wound of the Head.* Louis, æt. twenty-seven years, offered only a wound of the head, which caused some reactional symptoms that disappeared after two bleedings.



On the 11th, the patient commenced to eat, and in a few days was entirely restored.

CASE X.—*Burn of the Thigh and Right Buttock.—Wound of the Left Leg.* Peter, æt. thirty-four years, presented a wound on the right buttock, and the superior part of the right thigh. There was observed also on the internal and middle part of the left leg a wound of a round form, of the size of a five franc piece, from which the muscles of the calf, violently contused and torn, project. Finally, the inferior members, and especially the right thigh, were more or less seriously contused. The patient, whose face bears the stamp of stupor, suffers acute pains. The pulse is frequent, but feeble. In the evening the stupor had disappeared, and the pulse had regained its force, and become still more frequent. Ordered bleeding. On the 8th, M. Jobert found the patient in the following condition: Skin hot, pulse hard and frequent. Sleepless night because of the severe pains which he had felt in his leg. Around the wound the skin was tense and red; the portion of the muscles which form a hernia beyond the edges of the wound are of a greyish color. The surgeon enlarged the wound by making, immediately above and below, two incisions, in order to relieve the strangulation, and thus prevent the mortification of the tissues. Being unable, from their situation, to apply ice to the burns, M. Jobert ordered them to be covered with simple dressing, and prescribed veal broth, sedlitz, bleeding, diet. On the 11th, the pulse was still full and frequent, and the skin hot but not dry. The large incisions made by the surgeon have not sufficed to prevent the mortification of the tissues which had been violently contused; and the leg presented on its internal surface, and in almost its whole length, a sphacelus which comprehended the skin and more or less of the subjacent tissues. On the 13th, the condition of the patient was in every way satisfactory, and he ate daily his allowance of food.

CASE XI.—*Wounds of the Head and Left Foot.*—Tous-saint, æt. forty-eight years, presented on the middle of the forehead an extensive wound, which was prolonged for some

distance upon the scalp. The superior eye-lid of the left side offered considerable ecchymosis. There was also a small and unimportant wound of the inferior part of the left leg. The patient had at no moment lost his consciousness; he did not complain a great deal of pain, though he spoke of a sensation of heaviness in the head. At the evening visit his pulse was hard and frequent. Ordered bleeding. On the 8th, and the day following, Jobert prescribed emeticised veal broth; venesection; cataplasms; diet. On the 13th, after five copious bleedings, no accident has supervened; the sanguine effusion in the eye-lid has been absorbed: the case was progressing well; allowed him a portion of food. On the 16th, the state of the patient continued to be satisfactory.

CASE XII.—*Burn of both Hands and of the Right Knee.* Mennier, æt. forty-six years, was burnt on the dorsal surface of the two hands, and also upon the superior part of the right knee. On the 8th, Jobert ordered the burns to be covered with a cloth dressed with cerate, and upon this bladders to be laid filled with ice; he prescribed, at the same time, emeticised veal broth; bathing with warm water; diet. On the 10th, no complication had occurred; allowed a portion of food. On the 13th, the patient complained of pain in the left side of the chest; but the most careful examination revealed nothing. Notwithstanding this, however, Jobert ordered some cups to be applied to the painful part. 16th, patient continued to progress well. The pain in the chest has almost completely disappeared; the burns have commenced to cicatrise and every thing promised that the patient would soon be able to quit the hospital.

You may say, and with truth, too, that these cases present no special interest; but it is by a report of the treatment of simple accidents, that I can give you the most correct idea of the existing state of French surgery. With all the great points of the science in France, American physicians are of course familiar. With the minor but not the less important features they may not be so well acquainted. Relative to the local treatment of burns, we see that the two surgeons of St.

Louis hospital use widely different therapeutic agents. Thus, Jobert employs, as a general method, whatever may be the degree of the burn, refrigerants; covering the wounded surfaces with a greased piece of linen, upon which he afterwards applies bladders filled with ice. By this method he proposes to obtain, 1st, the mitigation of the acute pain incident to burns; 2d, the diminution or prevention of the consecutive inflammatory reaction; 3d, the diminution of the supuration which precedes and follows the fall of the eschars; 4th, and finally, the more rapid cicatrisation of the wounds. It is necessary to remark, however, that there are cases in which the employment of ice is contra-indicated; as for instance when the patient presents complication on the part of the thorax, or even a predisposition to pulmonary diseases; when the burns, situated on the chest or the posterior part of the trunk, are of very great extent; in which latter case the dorsal decubitus will be impossible, and in the other case we should aggravate pulmonary affections, or at least favor their development. Finally, ice should not be employed during the period of catamenial discharges. Besides these there are, of course, other circumstances which render the use of ice inadvisable, to which, however, it is unnecessary to allude.

Malgaigne, on the other hand, prefers to the employment of ice the use of the oleo-calcarious liniment and carded cotton. He associates these two means, because the application of the cotton alone does not calm with sufficient promptness the pain, nor the liniment alone protect the injured surface from friction, as of the bed clothes, for instance. After the example of Velpeau, Malgaigne employs a liniment composed of equal parts of olive oil and lime water. M. Miguel, who seems to have occupied himself especially with this subject, prefers the following preparation: oil of sweet almonds, one part; lime water, two parts. Malgaigne, in employing the former liniment and dressing, thinks that he obtains especially, the diminution, and in some cases even the cessation, of the pain. Doubtless there are cases in which ice would be applicable, and probably more efficient than the liniment and card-

ed cotton; and there are other cases, again, where ice could not be used, and the liniment and cotton would be of service. There is no question in my mind that both means possess considerable value.

If I have not given you any of M. Rostan's clinical lectures which he commenced a month or two ago, it is because my private courses occupied me in such a way, that I found it impossible to do so in a satisfactory manner, and not because each one did not contain interesting and valuable matter. The following on the *march of pulmonary phthisis and the cadaveric lesions of this affection*, he delivered a few days since:— In bed No. 11, of ward St. Antoine, we had a woman who had died of a tuberculous affection of the lung. You see so many examples of this disease in the hospital, and you are so familiar with its history, that we shall not insist upon it at any length this morning. Nevertheless, this case presents a particular feature which renders it interesting and worthy of your attention. We proceed to recall, in as few words as possible, its history, and the pathological alterations that were found at the autopsy. The woman was aged twenty-four years. When she arrived in our wards she was, as you remember, very vague in her replies to our questions; we were obliged to interrogate her a long time with great patience and in the most rigorous manner; she replied briefly and unsatisfactorily to the questions addressed to her. Auscultation and percussion sufficed, however, to reveal her pathological state. She was confined, a short time ago—four or five weeks; since which time too she has felt sick; but in a general way, and without being able to indicate any organ which suffered particularly either in its functions or sensibility. She complained of weakness of the inferior members, from which one might infer, and in fact from which we did ourselves infer, that the spinal marrow was affected. Let us remember the symptoms observed in this respect; for although nothing of this kind was found at the autopsy, it is well to bear it in mind. She was of feeble constitution, lymphatic temperament; we pointed

out to you the narrowness of the thoracic and abdominal cavities, particularly the first; the thinness and slenderness of the extremities; the paleness of the face. At the time of her entrance and during the following days she had great thirst, dry tongue, no appetite, habitual constipation; her urine normal, and passed with facility. The pulse was 112; respiration 32; slight pains in the breast, vague and without any precise and determined seat. Cough not very frequent; some mucous expectoration without trace of pus. Menstruation performed regularly. The catamenia have appeared once since her confinement. Skin hot; no chilliness. The nervous system seemed unaffected, save the feebleness of the legs which we have mentioned. In this state of things you should percuss and auscultate the chest with care: this is what we did. We found very evident dullness under the left clavicle. Respiration was strong, hard, *soufflant*, almost cavernous. When the patient spoke, resounding of the voice; numerous crepitations during strong inspiration, principally during the cough. We pronounced, as our diagnosis, tuberculous pulmonary affection, at the third period. There was not the slightest question of this, and the physical signs were unfortunately of disheartening clearness. Remark, moreover, that this woman assured us, that before her pregnancy her health had been perfectly good; that it had appeared equally good during gestation, and that before labor she coughed very little, if at all.

The author of a recent work endeavors to establish, that pregnancy and parturition exercise no appreciable influence upon pulmonary tuberculisation. Some distinguished men have asserted that the march of the tuberculous affection was in no respect accelerated by these conditions. But at the very moment when the authors of whom we speak were setting forth this opinion, we have had occasion to observe, in both the hospital, and in our private practice, examples of tuberculous women in whom, contrary to this assertion, the disease had progressed very rapidly after the labor. We must retain the conviction, then, after the daily observation of numerous facts, that under circumstances of this kind, tuberculisation makes



ordinarily very rapid progress, and are obliged to dissent from the views above alluded to. The very case about which we are occupied this morning, is in direct opposition to those views. Before and during her pregnancy, the woman had very little cough. She is scarcely delivered when the tuberculous affection assumes a more rapid pace, and in a very little time, only a few weeks, death supervenes. As to the general state, when we saw this woman the first time, we could have said that the disease with which she was affected was *latent*, although the local state was already advanced, as was proved by the dullness, the pectoriloquy, the rudeness, and the *soufflant* character of the respiration. There had been constipation, which is an uncommon circumstance at the period when the alteration is so serious. During the greater part of her sojourn in our wards, the disease seemed to remain stationary. We ought to say that, the diagnosis once established,—the affection recognised in a positive, and perfectly distinct manner,—we did not subject the patient to an attentive daily examination. We contented ourselves with merely a glance at the general condition, and with watching for the appearance of symptoms which should indicate a grave alteration of the economy. One day the patient complained of having a diarrhea. This led us to make an attentive and thorough examination; the febrile state was more intense; in a word, every thing indicated that, arrived at its third degree, the tuberculisation had assumed a more rapid march. The general health suffered, the emaciation became greater, the features of the face became altered, the eyes sank, the cheek bones projected, and were colored with that ominous red; the face generally assumed a livid yellow tint; the general phenomena became more and more clear, and the diarrhea augmented from day to day. Up to this time we confined ourselves to the prescription of a palliative treatment, consisting chiefly of calming drinks. In order to combat the diarrhea, we have had recourse to a very ancient preparation, at one time very much used, but almost fallen into neglect at present; we allude to *diascordium*. This preparation is extolled

in the old pharmacopœias as a remedy for chronic diarrhea; it is composed of a great number of substances, the majority of which are astringents, among which we may mention the *rose de provins*, gentian galbanum, snake weed, (*polygonum bistorta*), storax, opium, etc., etc. The diarrhea ceased; after many intermissions it reappeared anew, and every time we mastered it by a few doses of the diascordium. We recommend the diascordium to you as being occasionally a precious resource. In certain cases analogous to this, the course consists in treating the symptoms, when we are able to do nothing more rational or efficacious. The patient died a few days since.

After having described in detail what passed during her life, let us pass to an account of what we have found at the autopsy. You know that independently of what we find in the chests of tuberculous persons—that is, apart from the affection itself, the pneumonias, the intercurrent and concomitant pleurisies—there is another very frequent series of lesions, namely, the alterations of the intestines, and especially of the small ones. These alterations are so common, so constant, that they generally receive but little attention. They are the result of an accumulation of tuberculous matter in the sub-mucous cellular tissue; and ulceration succeeds to the softening of this matter. Every one knows that these ulcerations have the greatest resemblance to those of typhoid fever. The case now in hand, in the actual state of the intestine, proves at once how great is this analogy, and at the same time that the identity is not such that it is impossible to distinguish always the one disease from the other. What is the character that may assist us in making this distinction? It is the determination of the seat. If the ulcerations are without the patches of Peyer and the follicles of Brunner, it will be easy to see, at first glance, that they were not produced by typhoid fever. Then the best marked, and deepest ulcerations are not in the ilio-cæcal valve, in phthisis, as they are in typhoid fever. They occupy even the most elevated points of the intestine. This is the most frequent disposition. At other times however, there is a closer resemblance between

tuberculous ulcerations—of which you have seen so remarkable an example—and those of typhoid fever, of which we have shown you a specimen within a day or two. In the case in hand, as also in one of typhoid fever, to which we have just made allusion, the ulcerations occupied the patches and follicles. Still in this instance there was no typhus; and yet there cannot be the least doubt as to the nature of the ulcerations. Some authors have pretended, because of the identity of seat and aspect, that it was sometimes impossible to establish, with any certainty, the distinction between the ulceration in the one and the other case; in other words, an intestine being given, to determine accurately whether it belonged to a tuberculous or a typhoid patient. Now we will point out a character, by paying attention to which you may get clear of any doubts that may arise in your minds, and which will preserve you from confounding two pathological conditions so essentially different; this is the examination of the mesenteric ganglia.

In typhoid fever, as in tuberculisations, the mesenteric ganglia are tumefied, voluminous, diseased; but in the first case, the affection is purely inflammatory; they are hypertrophied, red, bluish, slate colored; they sometimes even suppurate. In tuberculous phthisis, they are always white, exclusively formed of tuberculous matter, and perfectly recognisable when divided with the scalpel. They are cheese-like and opaque; that is, they are tubercle, in the full force of the expression. And, now, in the case before us, what are the alterations that we have found in the lungs? Ancient adhesions, flabby lungs, caverns containing softened tuberculous matter mixed with blood; though we cannot decide whether the presence of the blood is not owing to the too violent pressure of the hands of those who made the autopsy. The presence of these caverns in the points which we had marked out, accounts for the cavernous *souffle*, and the gurgling sound heard during life. It is not our intention to give here the anatomo-pathological history of pulmonary phthisis, and shall finish our morning lesson by calling your attention to the fact that these lungs offer the three degrees

of tuberculisation—from the miliary granulations, abundantly disseminated throughout the whole of the lung, to the excavations situated as they most generally are, at the superior part.

M. Hugier, in the latter part of April, commenced his annual course of lectures, at Lourcine hospital, on the diseases of the genital organs of the female. One of his lectures was devoted to the diagnostic signs furnished by the inspection of the vulva and of the orifice of the vagina. He commenced by saying—Among the different means that may aid you in the diagnosis of the diseases of the genito-urinary organs of the female, there is one which authors scarcely mention that merits your attention. It is the inspection of the external genital parts. By the aid of this simple and unique means, we are often enabled to recognise certain facts, to distinguish certain uterine diseases, the existence of which is sometimes overlooked, or detected only after long and repeated examinations, insufficient and even inapplicable in many cases. In fact, you meet with women, who from fear, from excess of sensibility, from a feeling of real or affected modesty, refuse to allow you to pass into the interior of their sexual organs either your finger or the speculum. It happens, moreover, that with virgin girls, with women suffering from violent inflammations of the genital organs, or from certain vices of conformation, either natural or acquired, it is impossible to carry our exploration within the vulvar orifice. These, now, are grave and embarrassing circumstances, which render still more precious a diagnosis whose elements are furnished entirely by the inspection of the vulvo-perineal region in certain cases of uterine affections. The attentive examination of the aspect of the vulvar region conducts us not only to the diagnosis of certain affections of the vulva itself, of the vagina and of the uterus; but enables us also to judge, in some degree, of the morals of women; in certain circumstances of their sexual habits. But this is not the place to expose the various changes that the vulvar and anal regions may

present, and to enter into their physiological and moral value. Let us hasten to this simple indication, to this question which possesses a true practical utility; the inspection of the vulvo-perinæal region as applied to the discovery of vulvar, vaginal and uterine diseases. Affections of the vulva, and vagina having been the subject of our lectures last year, we will confine ourselves now to diseases of the uterus. And first, of the aspect of the pudendum in the physiological state, in comparison with the morbid affections of the organs of generation.

1st. *Pregnancy.* The vulva in pregnant women presents a violet tint, barely indicated by authors, and no where described with the proper detail. This tint, of a violet red, entirely characteristic, is not uniform, not equally well marked throughout. Little apparent upon the internal surface of the great lips, it becomes very sensible upon the internal surface of the nymphæ, in the neighborhood of the clitoris and *meatus urinarius*, upon the tubercle of the vagina; when the mucous membrane becomes in some degree more delicate, thinner and more transparent. This violet tint cannot be confounded with the discoloration which certain women present from a varicose disposition of the veins of the genital organs. This latter is inseparable from the course of the venous trunk, whose form and direction it reproduces, whilst the tint of which we are speaking is in no degree confined to the course of the veins; it is spread out, so to speak, like a sheet; the discoloration, besides, does not offer the same shade in these two different states. It is at the end of the second month of pregnancy that we commence to observe it; and it becomes very evident in the course of the third month. The existence of the fact to which we refer, possesses an incontestable value; it precedes all the other sensible diagnostic signs of pregnancy, which can never be recognised before the end of the fourth month of gestation. We believe that the appearances of which we speak do not exist except during pregnancy, as it is only then that they can be demonstrated; a circumstance which acquires a certain value in a medico-legal point of



view. As to its origin—as to the causes which produce this violet tint itself, we may remark, that this phenomenon can only be attributed to the state of hyperæmic congestion in which the uterus is found, and to the compression of the pelvi-uterine veins. But is it objected, how does it happen that this tint does not exist in those states where various diseases of the uterus develop, to a considerable degree this organ, and constitute it equally the seat of a hyperæmic congestion? We will not attempt to refute this argument by physiological reasons; what is allowed us, and what is important is the establishment of the pathological fact itself.

Another peculiarity among pregnant women is the state of humidity of the vulva, which under certain circumstances may amount to a true discharge. The cellular tissue of the labia pudendi, nymphæ and clitoris, becomes the seat of a slight serous infiltration. Further, the piliferous follicles become hypertrophied and give to the external surface of the labia a granulous, mammellated appearance. The sudoric apparatus and the sebaceous glands perform their functions with increased activity, which causes an abnormal exaltation; a glucy and sticky condition of the parts. Whereas in those cases that may simulate pregnancy, the labia pudendi and nymphæ in some degree wither, and grow thin.

Let us sum up the characters furnished by the aspect of the vulvar region, which may serve us in the diagnosis of pregnancy. 1st. Violet tint, characteristic, and almost never wanting. 2d. Hypersecretion of the piliferous follicles; hypersecretion of the sebaceous follicles. 3d. Hyper-sudoric secretion; various degrees of œdema.

II. *State of the vulva after delivery.* It is especially in a therapeutic and medico-legal point of view that the examination of the state of the vulva after delivery merits particular attention. Let us see now whether this examination will lead us in any given case to determine whether labor has occurred at a period more or less recent. In a woman lately confined, we observe an abnormal dilatation of the vulvar orifice, a depression and shortening of the perineum, a widening of the

fourchette with or without rents, with or without recent cicatrices; the folds of the vulva, and the nymphæ are a little thicker than ordinary; from the vulva there flows a turbid liquid, resembling lees of wine, of an earthy or brick dust color, and specific odor. Relative to the rents of the vulva, you should especially remark their seat, extent and direction. If these rents are the result of labor, they will be seated, by preference, towards the posterior part of the vulva, at the fourchette, then upon the lateral parts, more often to the left; finally towards the union of the nymphæ with the labia majora, and particularly on the left side. You should note the form and direction of these rents. Those that are found in women recently delivered ordinarily offer a triangular form; the summit of which triangle looks towards the centre of the orifice of the vulva, whilst the base is directed towards the thighs; that is to say, from within outwards. Such is not the disposition of the solutions of continuity which are the consequence of external violence, as of the introduction of foreign bodies into the interior of the genital organs. Uniting all the signs that we have alluded to and described, you will be able to conclude as to the existence of an anterior and recent labor, and thus furnish useful light in a question of medical jurisprudence. The aspect of the vulva affords other peculiarities, in certain constitutional and pathological conditions of the female. In blondes—soft and lymphatic women—in chlorotic and scrofulous women, those who have a habitual amenorrhea, the labia pudendi, nymphæ and clitoris are poorly developed; the vulva is covered with very few hairs; the mucous membrane is pale, shining and cold, the papillæ and follicles are but slightly marked; the color of the vulva at its entrance is hardly distinguished from that of the skin of the labia majora and minora, as you will have an opportunity of observing at the end of the lecture, in two women laboring under a uterine affection. The skin of the vulvar region is deprived of the pigmentum that is observed more or less abundantly in *brunes* of good constitution, and which makes the labia pudendi and nymphæ present a very marked difference in color from the abdomen and

thighs. We moreover find in lymphatic and chlorotic women the orifice of the vulva and the beginning of the vagina often bathed by vaginal and uterine liquids; in this case you may rest assured that you have to deal with a hypersecretion from the vagina, arising from atony, with a uterine catarrh of the same nature, and that tonics and ferruginous preparations are indicated.

Let us add to the preceding some words upon the character of the liquids which bathe the vulva. If in separating the lips of the vulva you see escape an abundant, reddish, sanguinolent liquid, of a strong odor, you may suspect the existence of a cancer, of a polypus, or of a fibrous body projecting into the cavity of the uterus. If the liquid is creamy, of a yellowish white, more or less consistent, and not thready, nor elastic, it comes from the vagina. If there are albuminous flocculi, if the liquid is tenacious, transparent, of a greenish or yellowish white, it proceeds from the uterus, and you have to do with a simple hypersecretion, or a purulent uterine catarrh. We may still further remark, that in the case of cancer of the uterus, of fibrous tumor, of polypi, the rugæ and the folds which exist upon the mucous membrane of the vulva are almost entirely effaced; the papillæ and follicles have, so to speak, disappeared; the parts assume a smooth aspect, polished and shining, of a dim, pale tint. By this character alone we were able to expose, not long ago, an error of diagnosis in the subject of a woman regarded as having a uterine cancer, but who in reality had only a visico-vaginal fistula. This fistula, in consequence of the sojourn of the urine in the vagina, had inflamed and indurated the parts. Our first diagnosis based only upon the aspect of the vulva, was confirmed by a more profound and complete exploration by means of the touch and the speculum. What we have said must be sufficient to convince you of the value of the examination of the external genital organs in certain diseases of the uterus, some of which we will treat of at our next meeting.

The matter of these last pages will no doubt strike the reader as curious. It exhibits French medicine and French socie-

ty in what, to many, must appear a singular aspect. No where, probably, but at Paris, would it have entered into the minds of physicians to resort to examinations such as are here described, as a common practice, to make out the diagnosis of common diseases, or to decide upon the existence of pregnancy; and in no other society but that of this capital would females submit to such exposure for such purposes. The subject is instructive. We see to what refinements the processes of diagnosis are carried by practitioners here, and what novel and strange methods are put in requisition. A superficial examination is sufficient to convince us, that in this department of the science the French physicians are taking the lead of all others, and that in the investigation of diseases incident to females, they enjoy facilities such as no other practitioners can command.

PARIS, July, 1847.

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.*—

By DAVID W. YANDELL, M.D., of Louisville, Ky.

Having spent nearly four months in a tour through Europe, in which I have seen the principal cities of the Continent, I find myself at the beginning of the lecture term once more in beautiful Paris. At some future day, when I have more leisure, I may give you some account of the things medical seen on my journey—of the noted medical men of Berlin, Vienna, Venice, Florence, and Rome—and of the medical institutions of Germany and Italy; but at present, amid the pressing calls upon my time made by studies which must not be neglected, I can do nothing more than send you a few of the practical details gathered in my attendance at the hospitals.

*Velpéau on Fractures of the Femur.*—M. Velpéau, in his last annual summary of the cases that had been treated in his wards during the scholastic year, 1846-'47, among other things, spoke as follows of Fractures of the Femur:

You have had opportunities for observing twelve cases of fracture of the femur, among which were fractures of the body, of the neck, and of the extremity or condyles of this bone. We have had only one example of this latter variety; this was in an exceedingly intractable little boy, who, in a fall had broken the external condyle very obliquely. This single case, however, has sufficed to show you the difficulty of precise diagnosis, as well as of the coaptation of the parts, and how important it is not to confound this variety with fracture of the body, the treatment and prognosis of which are essentially different.

The danger of fractures of the inferior extremity of the femur are of two kinds, and relate—1st, to the possibility of inflammation of the knee; 2d, to the production of a more or less considerable deformity. This last accident may itself be grave in two ways; the joint, deformed either by the fact of the fracture alone, or by the irregularity of the consolidation, will present inequalities that will produce stiffness in the movements, perhaps a demi-ankylosis; or, the extremity of the femur, badly consolidated, as nearly always happens, will offer projections which, pressing on the surrounding tissues, will give rise to a more or less severe and more or less constant pain, and lead to ulceration of the vessels, nerves, skin, etc. As I have hinted, the treatment of fractures of the condyles and of fractures of the body of the femur is entirely different, the former offering difficulties that you do not encounter in the latter case. This is owing to the fact that fractures of the condyles are ordinarily unequal, irregular, angular; and, as in this region the bones are naturally irregular, covered with projections or points, it is very difficult to distinguish, in the midst of the tumefaction of the soft parts, what are the connections, extent, and form of the fragments. These difficulties which you experience in establishing a pre-



cise diagnosis imply that there are no fixed rules of treatment; for how can you deal with fragments of which you know neither the form nor direction? How effect an exact coaptation? Especially, how can you maintain these fragments on which you have no hold? Thus it is we are obliged to grope our way; here you have the reasons which induce us to place by turns the leg in the various degrees of flexion, extension, and rotation, until we succeed in bringing the fragments in a favorable position. But even here, the muscular force acts against the efforts of the surgeon; the muscles in drawing upon the leg tend to elevate the tibia, and place it upon the fragments, which it slips between, separates, and produces a transverse displacement of greater or less extent.

You were able to observe all these accidents in the case of our little patient whose indocility added to and increased the difficulties just enumerated. You saw the irritation caused by the irregularity of the fragments produce an abscess, which gave me for an instant much uneasiness for the joint; though this abscess, once opened, improved very rapidly and the patient left the hospital cured. You have had an opportunity of seeing him since, as he returned and passed some days in our ward for a light contusion situated on the right leg.

It has been your good fortune to have had opportunities in the course of this year for observing the three varieties of fracture of the neck of the femur. We have had, you will remember, patients in whom the fracture was seated within the articular capsule, (*intra capsular fracture*); in others the solution of continuity was external to the capsule, (*extra-capsular fracture*); finally, some have offered the modification called *fracture by penetration*, in which the neck of the femur was *buried* in the head of the bone. Two patients have presented us the characters of this last species of fracture; that is, with them, there was notable shortening of the limb, rotation of the foot outwards, absence of crepitation, and the leg could be lifted up. If the member did not lose its functions, if there was not immobility, it was owing to the fact that the

neck having entered the head of the femur, the penetrated fragment maintained the fragment penetrating it.

In the extra-capsular fractures, there is projection at the hip; the pain is seated beneath the articulation; there is shortening, mobility; possibility of giving to the member its length; the leg cannot be raised; the point of the foot is turned outwards.

In intra-capsular fracture, the fold of the groin is effaced; the pain exists on a level with the articulation; the rotation outwards is more marked than in the former case; shortening; loss of functions of the member.

You have been able to see that if these fractures have a certain gravity, it is much more by reason of the advanced age of the patients, of the necessity of confining them to bed, than to the solution of continuity itself. There are no important organs or viscera in this neighborhood to be wounded. This class of fractures occurs mostly in old people, and one is hardly at a loss to comprehend that a casualty which requires two or three months of confinement, is serious. Nevertheless, it should be remarked that certain old persons support the immobility without any great inconvenience.

You may remember the woman, 83 years old, who kept her bed for more than two months without accident, without her health appearing affected. But I must insist that the contrary is most often the case, and one can easily conceive that there are very few healthy persons who after keeping their beds for a certain length of time, would fail to become diseased, for exercise and motion are necessary to the integrity of the functions; the circulation languishes, the digestive organs grow sluggish, no longer act with their accustomed energy, and finally become covered with a muddy coat, which alters the mucous membrane. Nothing is more certain than that if you place an old person in these conditions he runs the greatest risk; he loses his appetite, then comes diarrhea, marasmus, and often death. I hope you will remember this; many old persons who are treated for fracture of the neck of the femur die in this way.

Another danger attendant upon fracture of the neck is owing to the prolonged compression experienced by certain projecting regions; such as the eschars of the sacrum, grand trochanter, etc.; eschars which may penetrate to the bones and change them; which produce an abundant suppuration, and react upon the whole economy in an unpleasant manner. It is in virtue of these various circumstances that the fractures of the neck of the femur possess gravity.

The question of the consolidation of intra-capsular fractures has been differently resolved. Sir Astley Cooper rejected the possibility of consolidation, because the head of the bone, receiving fewer vessels, no longer preserved the same vital energy, and could not furnish the elements of the reparatory work. This opinion, however strange it may appear at first glance, found numerous partisans, among whom was a celebrated surgeon of Montpellier, Delpech, who went so far as to offer a prize of two thousand francs to the person who would show him a consolidated fracture of the neck of the femur. It is also true that he afterwards awarded the prize to himself.

One of the first who examined the other side of the question was Smith, who published a memoir accompanied by plates, and endeavored to prove that these fractures could be consolidated. But it is apparent from the difficulty which he had in collecting examples that this consolidation, if it is possible, is also extremely rare. It is clear, that in the observations he cites, the consolidation is real; but these facts appear to belong to the category of fractures by penetration. Now, for my own part, I no longer consider the consolidation of fractures of this kind to be an open question. It was not of those that Sir Astley Cooper meant to speak, because they had attracted very little attention up to that time. The memoir of Smith, then, does not demonstrate the possibility of the consolidation of intra-capsular fractures, without penetration of the fragments.

Even in the mass of facts collected by M. Chassaignac.

and borrowed especially from Amesbury, Stanley, Vanhonte, Brulatour, etc., one sees that if these fractures do consolidate, such instances must be rare; and that in no case is the consolidation ever complete as in the body of the bone.

How can we comprehend, in fact, that intra-capsular fracture can be completely consolidated, when we remember that the head is no longer held by any thing but the round ligament, which contains only a few capillary vessels? How hope, under such circumstances, that a complete callus will be developed, especially when it is impossible to maintain the two fragments in perfect coaptation? A priori, then, the consolidation appears difficult; and since the facts collected and the observations published, are not of a nature to remove all doubt, one is right in still doubting.

Here, now, is probably what passes: there is not a complete callus, but a considerable work is established, which leads to the formation, within the capsule, of osseous plates—of stalactites. These osseous plates, at first small, gradually extend, join to one another, and form an imperfect mass which encases the neck of the bone, re-establishes its solidity, and thus causes the thigh to recover its movements. But in certain cases, the capsule becomes itself encrusted with calcareous matter, the movements remain, embarrassed, difficult, and the lameness persists.

From all this, one may deduce a therapeutic consequence. Why treat these fractures, since, as I have shown you, the treatment may be attended with serious inconveniences and the consolidation would be irregular?

This is the starting point of the doctrine of Cooper.

I will not speak of the various bandages invented for the treatment of fractures of the neck of the femur. For twenty years I have in some degree left the patients to themselves. If the fracture is extra-capsular, mobile, in an old person, I place the member in demi-flexion, put a cushion under the popliteal region; then at the end of fifteen or twenty days, I make the patient get up and walk with crutches. The weight of the member makes extension in the

walk; the movements do not hinder the formation of stalactites, of the osseous vegetations which establish the consolidation. From this mode of treatment it results that the patients are able to walk about at the end of the third week, first with crutches, then with a cane; whereby, consequently, they do not incur all the dangers attached to a long confinement in bed; the movements of the limb are established in part, and sometimes the lameness at length disappears. At the end of six weeks upon this plan the patients are at the same point as after three, four, and five months of treatment by immobility, and they have not been exposed to the same dangers. Further, they have not had to support the pains caused by a bandage keeping up continued extension, nor all the accidents that it induces, eschars, œdema, etc. Certain surgeons reject this treatment from fear of shortening; but this is entirely chimerical; for the patient does not rest upon the weak member, he walks upon the other foot, and, as I have just now told you, the weight of the member exercises a continued extension which one must court. The fragments are not agitated by the movements, for these do not go on at the articulation of the hip where they would produce a lively pain. Of the twelve patients whom we have treated this year, one alone has died, and that occurred because we were not able to make him get up.

*Cyst of the Liver.—Repeated punctures.—Consecutive Inflammation.—Influence of the air in accidental cavities.*—I propose calling your attention this morning, said M. Velpeau, to the patient, the history of whose disease since his entry into the hospital, which was many months ago, until this moment, when I intend performing a sort of operation upon him, offers us useful instruction in a practical point of view.

This man has in the right hypochondriac region a tumor belonging to the liver; I believe that this tumor was primarily hydatid, though I could in no wise detect that particular *frémissement* which has been called *bruit hydatique*.



The first time that I punctured it a transparent, citrine, limpid liquid came away; the patient was relieved, and it was sometime before the tumor filled anew. I then practiced puncture for the second time, when the liquid had another aspect; it was reddish; the tumor now refilled itself with greater promptitude. A third puncture was made which gave issue to a liquid again modified in its aspect; it was redder and thicker. A fourth puncture became necessary. It is now some weeks that well characterized pus has come away from the tumor. You see this was a cyst, at first almost inert; in consequence of the first puncture there was an irritation established which was not very intense; after the second it was more marked, and after the third, the irritation was sufficient to determine locally a very violent pain, and an inflammatory action which gave rise to a general febrile reaction to such a point, that pus was formed in the tumor and the fourth puncture gave issue to it.

Thus, this cyst, at first perfectly inactive, gradually became irritated and inflamed, and has become something more serious than it was previously. What is the cause of this change? It is most certainly not the introduction of air that we can accuse; the canula was extremely small, and all necessary precautions were taken in introducing it to prevent the introduction of air into the cavity. I repeat, that puncture practiced in the deep-seated tissues may often give rise to inflammation without the air having penetrated, without the air having any hand in it.

There are persons who think that subcutaneous punctures cannot produce inflammation; this is an error. These punctures are not always unattended by danger; they are not as innocent as they are represented to be.

Our patient had a cyst for many years; it gave him almost no trouble; all the functions of his system were well executed; he was in almost perfect health, and now behold him in an entirely different state. Before, it was possible to leave him in the state in which we found him; now, it is impossible to leave him without treatment.

For a long time I have hesitated about treating him; for the means which we possess against his disease are not to be depended on, and may even be of dangerous tendency.

In surgery, we often have cases comparable to this, as, for example, tumors of the ovaries, fibrous bodies, which are, in a great number of circumstances, compatible with long life. For these tumors, persons have dared to open the abdomen and thus extirpate them; and it is especially in England and America, that these rash endeavors have been made. As for me, I blame them very severely; these are unreasonable attempts which are unworthy of surgery. In the beginning, I recoiled before an operation, and I had engaged our patient to quit the hospital, but he afterwards refused; he wished that I should cure him. I decided with pain to make a second puncture, and this little operation has determined an inflammation which may result fatally if I leave the patient without treatment. For thirty years his affection has been beyond the resources of art; to-day it may be combatted. A first procedure consists in incising the walls of the abdomen upon the tumor, to lay it open to its bottom and put in a pledget of lint. This is the most prompt, but also the most dangerous procedure, for the peritoneum is opened, and the matter may escape into its cavity; a double chance of peritonitis. Unless one be assured that the peritoneum is adherent, he must reject this operation. Dr. Graves, of Dublin, acts in another way. He incises the abdominal walls layer by layer; then, arrived at a few lines distance from the peritoneum, if there be adhesion, he punctures on the spot, if not, he stops and waits, hoping that a local inflammation will cause the peritoneum to adhere to the tumor and the walls of the abdomen.

This procedure is not sure; first, because it is impossible to go with certainty just to the peritoneum, without wounding or opening it, and afterwards because the inflammation, instead of being adhesive, may be purulent, and the pus, if it escapes into the abdominal cavity, will produce a peritonitis.

Further, the tissues in cicatrizing, thickening, may prevent the tumor from opening externally.

M. Begin does better. He incises in the same way to the peritoneum; then he incises the peritoneum as respects the tumor. This last naturally becoming engaged in this species of button-hole, contracts adhesions upon its sides; later, the tumor is punctured. This procedure has, to my knowledge, been employed two or three times by M. Begin; I have myself used it twice with success; but it is only applicable when the tumor is globular; if it be flat as this is, it does not engage itself in the button-hole, and its gliding upon the borders of the wound may produce an inflammatory irritation.

A fourth procedure is that of M. Récamier, and it is this that I am going to adopt in the case of our patient, because it is the best. It consists in the application of caustics to that portion of the abdomen corresponding to the tumor. It is necessary to have a deep eschar and as large as a five franc piece. Three or four grains of caustic must be applied. Then wait for or endeavor to hasten the fall of the eschar. Apply the caustic four or five times, until you have destroyed the entire thickness of the abdominal wall. You thus forcibly produce an eliminatory inflammation without, and an adhesive one within. When you arrive at the cyst, introduce the instrument. These means are then, so to speak, but preparatory. They have for their end to bring the tumor to the exterior. This obtained, you act upon this tumor as you would act upon an external one. As far as the operation goes nothing is more simple; but is this all? We have here parietes of a thickness more or less great, but slightly retractile; the tumor may always remain open, as nothing tends to obstruct the cavity.

There remains a large cavern which may secrete a pathological liquid; and as it is almost impossible to make the opening in the most depending portion, the liquid stagnates and is decomposed by the air; this air is not at all an excitant, as has been said, but merely a chemical menstruum necessary

by virtue of its oxygen to all fermentation—to all decomposition.

Do you believe that the tissues will remain indifferent to the presence of these putrid products? No. The dead nature in chemical reaction will be at war with the living tissues. It has been counselled, the tumor being open, to exercise no pressure upon it, to leave it to empty itself by the organic retraction of the tissues.

It is an error to believe as many do, that the air may enter every open cavity. The air by no means enters with facility the cavities whose walls are soft; the atmospheric column may often approach and apply these walls one against the other, instead of being introduced between them. But if the walls are inextensible, the atmosphere is incapable, by its weight, of effecting the occlusion of the cavity by the mechanism that I have just mentioned.

In our patient, the fear of the introduction of the air into the cavity is well founded; the central parietes as well as the parietes of the liver are but slightly flexible; this inevitable introduction will not, however, produce a direct excitation of the tissues, but will simply afford a chemical menstruum to the morbid liquids which they will secrete. In what manner shall we oppose the decomposition? In these cavities, it is the practice to make detergent antiseptic injections, that are made to lodge there for a certain length of time by closing the opening, which may be done by various means.

Some days after, the inflammation assumed a bad character, pus was effused, and, escaping into the abdomen, a peritonitis was developed, from the effects of which the patient died.

*Continuation and conclusion of M. Hugier's lectures on Catarrh of the Uterus. Diagnosis.*—We have already seen what are the characters proper to the discharges in catarrh of the uterus, but we should not, although these afford the principal and essential elements of the diagnosis, omit to inquire

whether the disease be simple; whether due to a local or general cause; whether dependent or not on an affection of the tunic, of the neck, or of the body of the uterus; whether it is the consequence either of a lymphatic temperament, an anemic, or a scrofulous taint. These, you will at once perceive, are all very useful in furnishing the essential therapeutic indications, which we now proceed to speak of.

*Treatment.*—Our anatomico-pathological researches on catarrh of the uterus, rather than any purely therapeutical or speculative views, have led us to adopt a new medication which alone often proves efficacious after all the ordinary therapeutic means have failed. But we must repeat that it is important, nay, we should say indispensable, to examine into the causes to which the disease is owing—whether it be produced by excessive coition, onanism, syphilitic virus, etc. These circumstances, in fact, being known, certain therapeutical indications naturally present themselves to the mind. When the affection assumes an acute form and is accompanied by considerable reaction, local and general antiphlogistics are at once suggested; but it is not with this form that we usually have to do. It is rather with the chronic, and in such cases local antiphlogistics from the commencement are indicated.

If the catarrh is of an atonic nature, general and local tonic medicaments are to be insisted on. Along with these allow substantial and invigorating food; make use of aromatic and sulphur baths, seabathing; conjointly with these, free exercise in the open air, change of scene, moral stimuli, and the hundred *et ceteras* that will suggest themselves to the mind of the intelligent physician, may be made of very great assistance in the cure of his patient. Locally, tonic and astringent injections, with oak bark, quinine, rhatany, alum, etc., etc.

It has been thought, when these different means have failed to produce the desired result, that it would be useful to throw medicated injections into the cavity of the body of the uterus itself. This method, by no means new, was formerly somewhat in vogue, but had fallen entirely into oblivion,



when M. Vidal (de Cassis) again endeavored to bring it into practice. It does not appear to have answered the expectations of practitioners, as indeed was clearly foreseen by those who possessed correct and precise ideas relative to the seat of the disease against which these means were directed. If you remember what we have said in relation to this subject, you will have no great difficulty in understanding why injections into the cavity of the body of the uterus can be of no avail. The explanation is found in the fact of the seat of the disease being in the neck and not in the body; and that its anatomical element, the follicular apparatus, being more or less profoundly seated in the tissue of the organ, and therefore but slightly accessible to the liquid injected. It is necessary then, if we wish to arrive at more certain results, that our remedies should be directed upon the seat of the disease. Moreover, we declare that, in our judgment, intra-uterine injections ought to be avoided, not so much because they are capable, according to the testimony of some physicians, of producing serious accidents, but rather because they do not attack the true seat of the disease, this not being connected with the internal membrane of the uterus, and are therefore inefficacious. One can easily conceive the inconveniences to which we have alluded. It is no hard matter to understand that stimulating caustic liquids thrown into the uterine cavity may traverse this organ, and pass through the Fallopian tubes into the peritoneum, and there produce the most serious accidents.

M. Vidal (de Cassis) admitted, it is true, the possibility of the dreaded consequences ensuing, which we have hinted at, but contends still for the advantages of intra-uterine injections, and lays the inconvenience and danger which may arise solely to the improper manner in which the application is made. Our *confrere*, however, has modified the mode of injection pursued in the commencement of this practice, and insists that the injection should be thrown up in a slow and gradual manner; that one should not only not use a tube whose calibre entirely fills up the neck, but that

on the contrary, it should be free in order to facilitate the escape outwards of the injected liquid. If these rules are observed the injection cannot traverse the uterus and its tubes, and thus pass into the peritoneal cavity. We will even add that modified and administered as our colleague advises, intra-uterine injections will never be attended by any serious consequences. But it is not from fear of these accidents that we reject the method, but rather from a conviction that it is inoperative in a majority of cases; for not reaching the seat of the disease it can do good only in an indirect manner and in exceptional instances. Experience has taught us the insufficiency of the means proposed by Vidal, and it has done so by directing us to the anatomical element of the disease.

We will suppose that you have a case of uterine catarrh, and that, after having fulfilled the particular indications, examined the etiology and all the phenomena; in a word, that having taken into consideration everything proper to the disease, and used the ordinary list of remedies, the condition of your patient is in no degree amended—what would be the treatment? Our surgical therapeutics, and we wish here to speak only of them, would be as follows: Cauterizations, either with the nitrate of silver or hot iron; incisions, practiced in the cavity itself of the neck of the uterus, in order to destroy the mucous follicles which are the seat of the disease. These means may be used singly or associated together.

Let us now enter into some details on the subject. Cauterization with nitrate of silver is done by passing it over the whole surface of the neck, and all the part which projects into the vagina, when the follicles are the seat of the disease. To do this, you merely use a case armed with caustic of sufficient length to enable you to reach the neck—here you allow your caustic to remain one or two minutes; this being done, you withdraw the substance, and the operation is finished. Practiced in this way, cauterization has never produced serious accidents, either local or general, and the

results have sometimes been satisfactory, or in other words efficacious, though it has very often proved insufficient. If the affection were confined to the superficial follicles the cauterization would be all that was required, and there would be a strong chance, in the majority of cases, of effecting a cure. But if the disease be situated in the follicles lying at a greater or less depth in the substance of the tissue, it is easy to see that the cauterization would be insufficient. It follows, then, that in this case you must go deeper, and it is precisely with this view that we resort to incisions, which reach and destroy the seat of the disease.

When all other means have failed, we resort to incisions. For this purpose the speculum being introduced, we pass into the uterine cavity a bistoury with a truncated blade, narrow and bent. We then make eight or ten incisions, and sometimes more, into the tissue of the neck, the whole length of its internal surface. The instrument acts in pressing from behind forwards, as if we intended each time to withdraw it. These numerous longitudinal incisions should penetrate to the depth of a line, or even two, into the substance of the tissues, so as to arrive at the seat of the disease, and attain and destroy the follicles themselves. The incisions being made, withdraw the bistoury; and we are most generally in the habit of immediately afterwards cauterizing boldly and freely the internal surface of the neck, with a view of cauterizing to the very bottom of the fissures made by the bistoury. This operation, which from the manner in which it is begun appears so formidable and fearful, is usually borne without complaint of much pain. We have even seen women who seemed hardly aware of the operation, or who have only complained of a slight pricking sensation. We have never seen any serious accidents result from the operation. During the first twenty-four hours after it has been performed some women complain of slight pain above the pubis, which is sometimes attended with a slight febrile action; but very often it is not followed by fever at all, and as soon as this transient disturbance has pass-

ed there is always the most perfect calm. We have never seen metritis, peritonitis, or any important lesions of other more distant organs, produced by this operation.

It sometimes happens that there is a discharge of blood the day of the operation, but this is very rarely abundant, though we have seen instances of a true hemorrhage, resulting as was afterwards discovered, from the woman being either in, near, or just through her menstrual period. This you will see is a circumstance calling for the postponement of the operation.

Since we saw the cases to which we have just alluded, our practice is to operate during the intervals of the catamenial flux, and since we have adopted this course, we have not seen a repetition of the hemorrhage. We must add, however, that when we wish an abundant local sanguineous discharge, we must not only not avoid but absolutely take advantage of the menstrual period. Except under circumstances of this kind, it is the better practice to wait till some days after this has passed before having recourse to the operation.

This would be the proper moment to say a few words on the application of this method of uterine incisions to certain obstinate cases of amenorrhœa. Suffice it to say, however, that we have used it several times with success; that it should never be resorted to till all other means have failed; that we have never seen it followed by any serious local or general accidents; and that we shall endeavor to give the question all due attention at some future day; at which period we trust we shall establish that the employment of this means is much more natural and legitimate than would appear at first sight. Moreover, you will have an opportunity of judging of its efficacy and seeing its mode of application this morning, in the case of a woman suffering from an amenorrhœa which has proved rebellious to all the ordinary remedies.

Let us not terminate this lecture without recalling to your minds, that catarrh of the uterus may be symptomatic of different affections either of the neck or the body of the or-

gan, and that these last affections being susceptible of cure, by ordinary means, the catarrh, as a consequence, in its time disappears. But this does not always happen, for the original disease may disappear and the catarrh persist, as if it were the primitive affection. In cases of this description it becomes necessary to have recourse to the means of which we have spoken, and which differ, as is seen, from those employed in ordinary discharges, of a nature different from that which makes uterine catarrh.

We have as yet only hinted at a third method of cauterization which may be of use in the treatment of the affection under consideration; viz: the application of the hot iron. This means can be substituted for the cauterization by nitrate of silver; in fact it should be preferred in cases where the mucous membrane of the uterus offers granulations and fungous growths, which the red iron either destroys or advantageously modifies. But what we have said of the insufficiency of nitrate of silver may be applied also to the red iron, viz: that cauterization alone very rarely effects a radical cure when the disease is seated in the cavity of the neck.

It is now some years since we have resorted to the surgical means of which we have spoken in rebellious forms of uterine catarrh, both in our hospital and private practice, where the efficacy has been witnessed by great numbers of pupils and many of our colleagues, and we can now affirm to you that they are free from danger to the patient from beginning to end, and their employment is nearly always followed by the most satisfactory results.

The details which we have gone into concerning the pathological anatomy of the disease have, we hope, sufficed to convince you that this method is entirely natural, and its results consequently less surprising and inexplicable.

To conclude, our anatomico-pathological labors and clinical researches relative to catarrh of the uterus, have enabled us—1st, to establish the real seat of this affection, which we have shown to exist in the neck; 2d, to indicate the distinc-



tive character of the discharge belonging to the disease; and 3d, and finally, to propose the most rational and most efficacious therapeutical means to be employed in the treatment of this disease.

The bistoury which M. Hugier is in the habit of using, in the operation of incising the inner surface of the neck of the uterus, is of a very simple description, being merely a narrow elbowed blade two lines in width, with a long handle, at and a little before its junction with which the edge of the blade is rounded, while the remaining portion presents a cutting edge, with a slightly blunted point. The only thing which he insisted on the student's remarking was, the very slight angle formed at the elbow or juncture of the two parts of the blade, by means of which form it accomodates itself to the parts and admits of greater facility of use than is offered by a straight bistoury.

For several days past I have been laboring under influenza—called here *la grippe*—which is prevailing in Paris at this time. Velpeau and several other members of the Faculty, from the very tight way in which it has held them, have been obliged to suspend their various hospital duties. Velpeau was so much indisposed that he did not make his usual visit this morning.

Paris, November 30, 1847.

ART. III.—*Notes on Medical Matters and Medical Men in Paris.*

By DAVID W. YANDELL, M.D., of Louisville, Ky.

*On Induced Abortion in cases of Contracted Pelvis. From the Clinique of Professor Paul Dubois.*—Among the various means which the obstetric art opposes to the dangers incident to contracted pelvis, there is one which consists in the induction of the premature expulsion of the fœtus.

In most cases this expulsion is solicited at a period of pregnancy sufficiently advanced, that, the fœtus being viable, the operation may not prove unavoidably prejudicial to the preservation of its existence; the process thus effected is called *artificial premature labor*.

In some cases, however, it has been thought necessary to bring on this expulsion during the very first periods of pregnancy, when the fœtus has not yet acquired the necessary development for the performance (if it may be so termed) of extra-uterine life; that, is during the first seven months, the operation being then named *induced abortion*.

*Artificial premature labor* is, in general, only resorted to in cases of moderate contraction of the pelvis, and has for its end the preservation of the life both of the mother and child. It was long before this process, thus understood, was admitted into science—but at this day, its usefulness and justifiableness can no longer be the subject of serious contention.

The subject of this memoir, *induced abortion*, is on the contrary, only applicable to cases where the contraction of the pelvis is extremely marked; its inevitable result is the sacrifice of an undeveloped ovum, either in the embryotic or fœtal stage; but it is resorted to with the hope of saving the mother. It will be easily understood, from what has just been said, that this operation would not be quietly admitted into practice; that it met with very decided opposition; that many most serious objections were urged against it, and that its very profound abuse intimidated the moral sense of many

accoucheurs. Indeed, the question we now propose investigating, is from its very nature one of the most serious and delicate topics of discussion that can be found in the whole science of obstetrics.

The first advice for bringing on abortion with the view of avoiding certain dangers of full-term parturition, is now very ancient. The following prescriptions from Aspasia, a celebrated Greek courtesan, as quoted by Ætius, may be found applicable to our subject, so far, at least, as they were intended to prevent the perilous consequences arising from obstacles esteemed insurmountable by the natural efforts during labor. We find in Ætius the following:

Quandam mulieres etiamsi concipiant, in partu tamen periclitantur, sive ab uteri parvitate ut *ab id* factam perficere non possit, sive ab colli ejusdem angustiam, sive quod tuberculum aut tale quiddam in ejusdem ostio exortum est quod partum impedit; atque hoc sane optimi fecerint si a partu omni caverint. At si conciperint satius et factum corrumpere quam excidere.

And a little further on—

Si mulier at gignendum factum nepta per negligentiam conciperit, vehementissimis motibus uti jubeatur *et ut saliat ac gravissima onera levelet et ut decoctionibus urinam ac menses prælectantibus* atque *alvum sub ducentibus assidue utatur . . .* quod si hoc nihil profecerit ad *validiora auxilia* pergendum erit, etc., etc.

I have only given the smallest part of the numerous means prescribed by Aspasia for inducing abortion in the earlier periods of pregnancy; the list is very long and exceedingly curious, and it would appear that the knowledge of this matron on the subject was in no wise inferior to the actual ideas entertained by the medical world at this day. A fact very worthy of remark is that Aspasia used to teach and recommend, in cases of inability to bear children up to the time of pregnancy, on account of malformation of the generative system, such means as modern writers would never dream of. But I shall not detail them, but merely refer the curious to

"*Actii medici Graeci contractæ ex veteribus Medicinæ Tetrablos per J. Cornarium Lugduni*, 1549, pp. 961-2-3. Sermo xvi., Caput xvi., et sequentia," and after a few more words concerning the history of the induction of abortion, pass to the more practical portion of our subject.

The induction of abortion, considered as one of the scientific resources of our art, fell into disuse and was rejected in times posterior to Aspasia, it not being spoken of by authors of the middle ages. We do not find it advised in any work posterior to that of Ætius, and it had probably fallen into total oblivion, when in the course of the last century Wm. Cooper, at the close of the relation of a case of Cæsarian section, which had proved fatal to the mother, submitted the following question to Dr. Hunter, to whom his paper was addressed:

"Before I conclude," says Mr. Cooper, "allow me to propose the following question: In such cases where it is certainly known that a mature child cannot possibly be delivered in the ordinary way alive, would it not be consistent with reason and conscience for the preservation of the mother, as soon as it conveniently can be done by artificial means, to attempt to produce abortion?"—*Med. Obs. and Inquiries*, vol. iv., p. 271.

This new scientific principle, elicited by Mr. Cooper, was broached at a moment when the attention of the medical world was wholly occupied by a prior question of the same nature; viz: *the induction of premature labor*, which had already been approved of and sanctioned in a consultation of the most eminent men of the time, held at London in 1759, for the purpose of considering the moral rectitude, and the advantages which might be expected from this practice.

"Induction of premature labor" being applicable to a greater number of cases than "induced abortion," certainly offered more interest as regarded its results, and this explains why the former had been resorted to a certain number of times, and had already given rise to much discussion, and to numerous interesting publications, while the latter remained station-

ary—a mere proposition laid before the inattentive medical world.

On the other hand, there were a few individuals who, considering the disastrous results attending the Cæsarian section when performed in England, and seeing no chance for the “induction of premature labor” in certain cases of extremely contracted pelvis to save the child’s life, and very little probability of its preserving the existence of the mother, on account of the preposterous and mangled operation she was obliged to undergo, seriously turned their minds to the adoption, and their skill to the practice, of the principle suggested by Mr. Cooper. Among these men John Barlow stands the most prominent—(see his letter in *Medical Facts and Observations*, vol. viii., pp. 187 and 192. December 16th, 1779.)

In Germany the process was accepted and rejected by practitioners equally celebrated—Paul Scheel, Mende, 1802; J. P. Weidmann, Carl Wenzel, 1818, etc., etc.

In France, the proposal of this new operation was, at first, the particular object of examination and free discussion. What could we expect to find in favor of “induced abortion” in a country where Baudelocque and his school had severely condemned, as immoral, the induction of premature labor, which they very unscientifically styled “an abortion?”—(see Capuron’s work.) In fact, the attention of the French school was so completely engaged with the refutation of the principles on which the induction of premature labor was founded, that the proposition of *induced abortion* was left so completely in the shade that one is tempted to believe, that it escaped entirely unknown.

Notwithstanding the opposition of Baudelocque and of Capuron and their school, we see Foderé in 1813, Marc in 1821, and Velpeau in 1829, declare in favor of the justifiableness and the morality of induced abortion in certain instances.

The question might still be considered as having been an open one till Prof. Dubois proved to his colleagues of the French



Faculty, and to the world, even in a more satisfactory and conclusive manner than had been proved by Denman in the question of premature labor, the moral rectitude and the legality of the principle on which was based induced abortion in cases of contracted pelvis.

Before relating the case of induced abortion because of malformation, that we have lately witnessed at the clinique, I believe I shall not be performing a thankless task if I quote some of the very valuable remarks contained in Professor Dubois' memoir on this subject to which he referred when lecturing on this delicate point a few days ago. The memoir was published in the *Gazette Médicale* in 1843.

"Those who oppose artificial abortion have alleged that amongst the women in whom abortion is induced by any kind of violence, there are few who are saved or who do not run the greatest peril; that when they do not die from the primary accidents, they generally fall victims to consecutive accidents of a still more serious nature; that the resources of the Cæsarian section, by which one woman out of three, on an average, has been saved, is by far preferable to that of induced abortion; that by no means whatever can the accoucheur possess over the fœtus an absolute right of life or death; and least of all, that to cause the death of the fœtus in utero or to expel it therefrom by any means before the period at which nature endows it with the power to live its own life, is nothing less than a crime punishable by the laws.

"On the other hand, the partisans of the contrary opinion have answered that under certain very serious circumstances, when it would be proved that the mother and the child could not undergo without absolute danger, the process of parturition at full term, it is by no means immoral to bring on abortion, and between two unavoidable evils to choose the least; that in so serious an alternative, the imperfect or puny organization and existence of a fœtus scarcely endowed with any physical sensibility, enjoying no moral faculty, unconnected

as yet with the world by any external tie, cannot be compared with the existence of the mother whose faculties are developed, who is bound to society by numerous ties, and whose preservation, for all these reasons, is assuredly the most precious to be taken into consideration. — *Foderé, Med. Legal*, vii., p. 63.

Professor Dubois assumed the ground that the arguments here brought forward by both parties were not of a nature to elucidate and far less to solve the question at hand. Among those contrary to the principle, he would show that the one declaring it to be inconsistent with our moral duties, was based on an erroneous, or rather exaggerated conception of the law, and that among the reasons urged in favor of the adoption of "induced abortion," some had appeared to him rather of a sentimental than rational nature, and therefore, although they merited his personal approbation, he thought they possessed no positive value in a discussion of this kind.

Professor Dubois then proceeded to examine what had been termed the illegality and the criminality of "induced abortion." He said that although he was very far from being desirous of diminishing in any way the scrupulous sentiments inspired in the Profession by a rigorous respect and regard for the laws, he felt it his duty to place the question on ground where it might be free from all those moral considerations, which in the minds of many would render the scientific discussion of the principle very difficult to enter upon at the present moment.

Professor Dubois then remarked that abortion as it is understood, pursued and punished by the laws, is a secret art, criminal to the very mind of him who brings it on, as it is to the conscience of the woman who solicits or suffers the operation to be performed. Abortion induced by scientific means, on the contrary, is accomplished openly (*au grand jour*) with the intention of saving one of the two lives brought into jeopardy—an act which ought not to be offensive to the conscience either of him who induces abortion, in

those cases, or of the unfortunate creature who consents to undergo the operation. And then, again, abortion is not the only process of our art that needs to be legitimatised by the intention of the operation. The wounds, the mutilations inflicted daily by the hand of the surgeon, and which are sometimes resorted to for the purpose of removing a suffering that might have been borne, and put health, nay sometimes life itself, in very great danger, would they not be considered criminal if they were inflicted by other hands but ours, their execution originated in a guilty motive? However, the law has made no distinction in these cases—it is sufficient that the legislator should have placed the one under the denomination of *crimes*, and that the other should be rationally made distinct from them. Moreover, among the mutilations effected for surgical purposes, there is one nominally foreseen and very severely punished by the law—that is castration. Well, no distinction was made by the legislature, and it was, no doubt, deemed sufficient to indicate criminal castration, in order that all other kinds of castration, scientifically performed, might be the exception to the law.

Having thus dwelt at some length on the origin and progress of the principle on which induced abortion is founded, let us now turn to a more practical theme, and endeavor to elucidate the somewhat delicate question, in what cases ought this operation to be performed.

Leaving out of the present question the consideration of *tumors*, that may obstruct the pelvis and may be displaced, punctured, or removed with more or less facility; leaving out of our investigation those *diseases* of pregnant females (diseases of the circulatory system, the abdominal tumors, dropsy of the amnios, etc.,) for which cases the induction of premature labor may be deemed necessary and against which induced abortion would prove a useless remedy—for the reason that at an early period of pregnancy the above mentioned diseases have not generally acquired a dangerous nature,—we must limit our attention to cases of *contracted pelvis*, (similar to that actually under our observation at the

Hôpital des Cliniques, and lay down the conditions under which, the mother's life being incompatible with that of her offspring, we feel ourselves under the dire obligation of attempting to save her life at the expense of that of the fœtus. Such cases are not numerous, and may be defined as follows:

Cases in which the pelvis is so far contracted as to leave no possibility of extricating the fœtus per vias naturales, even by diminishing the size of its head, and where no other means remain for delivering the woman of a living child but the Cæsarian section.

The above condition exists when the smallest diameter of the pelvis is under two and a half inches, (French measure.) From two and a half inches down to two inches, the extraction of the fœtus can certainly be effected by embryotomy; but if we come to consider the cases of this nature, we shall be easily convinced that the extraction of a dead fœtus under these conditions is no less dangerous to the mother, than the Cæsarian section itself. Symphysiotomy would endanger the life of mother and child to about the same degree. Artificial premature labor would not be followed by a better result, the only advantage of the latter operation being in such cases, that the division of an incompletely developed fœtus would be somewhat easier to effect, and its extraction less injurious to the mother.

Now that we have laid down the rule as to the period of pregnancy at which it is best to act, the mother being in the condition to which we have alluded—and under what degree of contraction of the pelvis we are called upon to induce abortion, we shall, instead of reviewing the various methods used for this purpose, which I need scarcely remark are the same as those consulted in cases of induced premature labor, proceed to the case of the dwarf actually under the care of Professor Dubois, at the Hôpital des Cliniques, and learn from this most valued authority the reasons that influenced his choice of induced abortion, and the several means by which he endeavored to effect his purpose.

CASE.—Julie Gros, ætat. 30 years,—laundress. This woman measures only three feet one inch in height. Great distortion of the lower extremities; articulations knotty.—The trunk is short; head large; chin very prominent; complexion dark; expression very intelligent. Her general health has always been good, with the exception of some intestinal irritation three years back.

In September, 1846, she came to the Hôpital des Cliniques pregnant for the first time. Dr. Cazeaux who, at that time attended the wards in Professor Dubois' absence, learned from the patient that she had menstruated for the last time in June preceding, and after having ascertained the condition of the pelvis, he resolved to induce abortion. Dilatation of the os uteri was effected by means of prepared sponge (that is a conical piece of sponge tied up very tight and destined to increase in bulk by being in contact with the mucous membrane of the cervix.) After this and also the administration of ergot of rye, the membranes were ruptured on the 15th October, 1846. Abortion then took place without difficulty, at about four and a half months. The patient rapidly recovered, and left the hospital on the 11th day, proflering her oath that she would never be again found in the same predicament. Notwithstanding this, however, in November, 1847, Julie Gros returned to the same ward, pregnant for the second time. Again she came to solicit of Professor Dubois his intervention to effect her delivery, under circumstances very similar to those of the year previous. Her menses had not been seen since the 20th of September. Special reasons made the woman believe she had become pregnant on the 20th of September. Very soon after that date she had remarked certain sympathetic symptoms of pregnancy.

On the 2d of December, Professor Dubois pronounced her to be gone with child about two months and twelve days. He remarked that the determination he should take must depend upon the state of the pelvis. The conjugate diameter was measured by the finger; it was found to be two inches and one line in extent. The conjugate diameter being so



short, Professor Dubois examined the resources at his disposal, which in the actual state of things were as follows:

1st. Induction of abortion up to the seventh month included.

2d. Induction of premature labor.

3d. Operation performed with the view of enlarging the pelvic diameter. *a.* Pelviotomy. *b.* Symphysiotomy.

4th. Mutilation of the fœtus, or embryotomy.

5th. Cæsarian operation.

Then followed the discussion concerning the operation to be performed. Some of these processes, said Professor Dubois, must be excluded; for instance, induction of premature labor. For it to prove completely effectual, it would be necessary to have a viable child, and moreover that the child be able to pass through a pelvis, the conjugate diameter of which measured twenty-nine lines. The thing was impossible. Premature labor induced in this case, would be equivalent to induced abortion. In other words, we should have the trouble of inducing premature labor without being rewarded by the ordinary beneficial results which characterize that operation.

Was pelviotomy to be resorted to? or either of its two modes of execution, pubiotomy or symphysiotomy? We shall simply remark that in such contracted pelves neither one nor the other operation could sufficiently enlarge the cavity for the reception and passage of a fœtal head without doing great injury to the woman. The rupture of the sacro-sciatic ligaments would certainly follow symphysiotomy. Pubiotomy was still more out of the question with regard to its practicability.

Mutilation of the fœtus? At the term at which this pregnancy had arrived, Professor Dubois said that it would be a dangerous operation for the mother, and moreover, it would be a difficult undertaking for the accoucheur.

The choice therefore rested between two operations—the Cæsarian section and induced abortion. Let us, said Professor Dubois, make the discussion bear on this point; let us

weigh well the reasons for and against the chances offered by each of these operations, bearing in mind the while, the personal benefit and social importance connected with the question.

The advantages of the Cæsarian operation are the following: No particular structure being opposed to its performance in this case; its being, according to statistics, successful in one case out of three.

Now, on the other hand, continued Professor Dubois, as to statistics, the cases reported are generally the fortunate ones; all cases of this kind having been published, while it is well known that most of the unlucky cases have never been made public. As an instance of what he advances the Professor remarked, that the seven unsuccessful cases that had occurred in his practice had not all been published. And then, again, it is a fact that the results of the Cæsarian operation differ widely, according to the countries in which it is performed. Thus it happens that to our knowledge there is only one successful case out of all those practiced in England. If we turn to France, where the operation has been more frequently performed than elsewhere, we find that at Paris, not one of Professor Dubois' operations has resulted successfully to the mother. We may therefore infer from this circumstance, that not a single mother is likely to escape in this city. As for the children, those who survived for a certain time or continued to live, owe it almost entirely to the excellent care taken of them—the others, abandoned and neglected, have been lost sight of, and no doubt have run all the risks incident to their condition, which by the fact of their premature birth are rendered far more serious than those of children coming into the world by the process of nature. In conclusion, we may say that the Cæsarian section when performed in Paris is fatal to the mother, and that the children who in cases of this kind are often abandoned very soon die.

In the present case the woman says she would not be able to keep her child. As to bringing up the child himself, Pro-

fessor Dubois said that he had already reared two individuals whom he had ushered into the world by the Cæsarian section, one of whom was a fine tall soldier at this time, but that as to adopting a third child, it was an undertaking of rather too delicate a nature to be immediately decided upon.

Finally, there remains abortion. Here Professor Dubois dwelt at some length on the subject of the first part of this paper; the high importance of the question, the moral rectitude of the principle we have adopted according to scientific rules, etc.

Speaking of the various processes hitherto employed to effect this end—abortion—he remarked that the criminal one consisted in the administration of substances acting on the uterus by determining congestion in that organ, or else in operative processes, such as perforation of the ovum.

His opinion was that one of the best, as well as the most scientific methods, was the one resorted to in cases where it was wished to induce premature labor—that is the dilatation of the cervix by prepared sponge, (Kluges' method.) This method he esteemed much preferable to that acting on the principle of rendering the uterine system congested, as by warm baths, ergot of rye, etc., etc. If the former plan was not effectual, the old method then presented itself; namely, the perforation of the membranes. All these procedures tended to one and the same physiological end: to wit, the inducing of uterine contraction, whether we choose by the last process to evacuate *all* the amniotic fluid, as Clarke used to do, or only a small quantity of the waters as Meissner says he does now, by means of a curved sound conducting a trochar. To either of these two procedures Professor Dubois would prefer employing an intermediate one—Hamilton's method—which consists in the introduction of the finger into the os uteri and the detaching of the membranes from their connexions in the neighborhood of the orifice. This method has of late been somewhat modified by Professor Simpson,

of Edinburg, who uses a curved sound of large calibre to effect the detachment of the membranes from the corresponding uterine surfaces. Before, however, having recourse to either of these methods, Professor Dubois determined to try the effect of galvanic shocks on the uterus, with the view of producing primary contraction of that organ, or its secondary action, after having killed the fœtus by the shocks, and its acting as a foreign body *in utero*.

The apparatus used for this purpose was an electro-magnetic machine. The conductors being placed alternately on each side of the uterus through the abdominal parietes; again one on the fundus and the other on the cervix, *per vaginam*, the shocks were gradually increased, during one or two minutes, till they became insupportable. The experiment was renewed twice—the third time the patient was very refractory, and refused to inhale chloroform to allay the pain, when Prof. Dubois concluded to postpone the further trial of the galvanism for a fortnight, in order to ascertain if the uterus still continued increasing; finding that it did so, and being unwilling to inflict any more suffering upon the patient, who still continued exceedingly intractable, he entirely renounced this method, which he was the first to apply with a view of inducing abortion, and which he believed failed to produce its desired effects in this instance because of the want of power in the instrument used, and the indocility of the patient. On the 8th of January, 1848, he proceeded to accomplish his purpose by separating the membranes from the lower part of the uterus, which he effected by the introduction and gentle rotation, within the cavity of the uterus, of a curved sound of large calibre, avoiding, as much as possible, the rupture of the amniotic bag, which he hoped would be very effectual in aiding the dilating effect of uterine action.

Professor Dubois operated in presence of the class at 9 o'clock, A.M. A small quantity of blood was lost during the operation, and gave rise to a belief on the part of the Professor, which the inspection of the placenta afterwards

proved to be well grounded, that this body had been lacerated by the sound. The membranes, however, were not ruptured. During the day, uterine contractions began to be felt at long intervals. In the course of the following night, and particularly in the morning of the 9th, the pains set in pretty regularly and strong. They continued so during the day, and at 5 o'clock, P.M., dilatation being very nearly complete, the bag of waters was opened; delivery took place spontaneously between 5 and 6 o'clock, about thirty hours after the operation.

In his clinical lecture of the 11th January, Professor Dubois exhibited the placenta, a portion of which appeared lacerated, owing, no doubt, to the action of the sound which had been employed. He remarked that the labor had lasted a longer time than in the average number of labors, but in this case, labor was not effectually established before 5 o'clock on the morning of the 9th, the true pains having lasted, therefore, only about twelve hours, the time generally allotted to natural labor. In this preternatural case, said Professor Dubois, the first pains had been employed in preparing the cervix to dilate, as it had been surprised in a state quite unmodified, with regard to the process which was about to take place, and in which it had so important a part to perform. The fœtus came by the vertex, and pushing the placenta before it—another proof that the placenta had been detached during the artificial destruction of the uterine connexions, and had made its way to the orifice before the fœtus.

The patient has fared pretty well. Some abdominal pains and fever were present the second day after confinement. Two applications of ten leeches each were sufficient to restore a healthy condition. The sympathetic phenomena in the breasts which were noticed to be attempted, were more than realized on the third day, but very soon subsided. Things have continued to go on well, and the patient was expected to leave the hospital this morning, January 21st.



Few of the physicians of Paris appear to me more interested in the cure of diseases than M. Trousseau, and there is not among them one whose clinical lectures afford more wholesome and valuable therapeutical instruction. In one of his late lectures at the Hôpital Neckar, among other things, he made some remarks on *erysipelas in new-born children*, which I propose to report.

Erysipelas in new-born children, the Professor remarked, is a disease of frightful gravity; it attacks all classes indiscriminately, the rich and the poor, and it is almost invariably mortal, whether the children be in the condition of the most prosperous health, or whether they be cachectic. I have seen only three infants recover during the last nine years; the one was five months, the second three months, and the last a year old. All save these have died.

Although it is our object, this morning, to call your attention especially to erysipelas in infants, we may state to you certain divisions depending on the age of the patient, which experience has taught us to regard as being about as generally correct as general laws usually are: In the infant, then, (from one to two months of age) erysipelas is excessively grave; later it offers less gravity; and finally, towards adolescence, it does not differ much from that of the adult. You see a child who is not sick; the mother begs you, however, to examine it. She has seen in dressing it something not altogether natural about its genital organs, and she wishes you to look at it; you do so, and find, if it be a boy, the penis a little swollen and red; if it be a girl, the vulva slightly tumefied; detecting but this, you do not suspect its gravity, and hence do not distrust yourself. At your visit the following day, you are surprised to find the parts tumefied, the penis, the scrotum, or the vulva, swollen; there is no fever, no loss of appetite; you believe it an insignificant affair, and order a cataplasm. The next day the swelling extends a little towards the umbilicus, the thighs, the pelvis; this begins to be unpleasant; the infant now cries a little, sleeps a little less than usual, but does not vomit; it sucks, has no fever, no

cough, and no cerebral phenomena. When you return to your little patient, you are struck with its discoloration and pallor; it cries, it has not slept, it sucks with avidity, because it is thirsty; but there is neither diarrhea, nor vomiting; the swelling gains the thighs and the legs. The next day the paleness is greater; the infant no longer sleeps, and does nothing but cry; the erysipelas reaches the trunk, the feet, attains the neck, spreads itself, and it is rarely that death does not supervene the sixth or seventh day.

I have spoken to you of this open and undisguised march of the affection, in order to strike your minds by a description which shall cause you to mistrust yourselves, and prevent your feeling a deceitful security while the child is dying.

The prognosis is always very grave, and the reason is that the erysipelas is often accompanied by a peritonitis which sometimes resembles the puerperal species; it does not supervene immediately in the infant, but comes to cover the erysipelas; arises at the end of four or five days, and kills in twenty-four hours. It is a serious, indeed, an invariably mortal disease.

Furthermore, there very often exists an umbilical phlebitis; the umbilical vein becomes inflamed, and the veins of the liver become filled with pus. The infant is thus placed in the most alarming conditions that any one attacked with erysipelas can be; in fact, if in individuals laboring under deep-seated abscesses, gangrene, phlebitis, etc., an erysipelas supervenes, you announce death, and the patient dies. In the child, something analogous to this occurs; the umbilical cord becomes detached as a gangrened portion; it cannot be otherwise detached; then is there a noncicatized umbilical wound, and the erysipelas almost always commences at this point. Under ordinary circumstances, this condition of wound is nothing; but at the moment when puerperal fever reigns in the hospital there is a connection between the disease of the mother, who dies of puerperal fever, and the disease of the child who dies of erysipelas.

A woman, seven months gone, occupying one of the beds of our ward, has had, for fifteen days past, incessant vomitings, her stomach being incapable of retaining anything whatever. We will seize this occasion of saying something of the vomitings which supervene in the course of pregnancy. I should remark, however, that in the patient to which I have just made allusion, there has existed a diarrhea for four or five months, and that she offers something which does not resemble the vomitings of which I propose speaking.

It is very common to see women attacked, during pregnancy, with vomitings which nothing is capable of arresting. We saw one instance last summer, and if the cases were collected we believe there would be many similar to it, of a woman who finally died under these circumstances from inanition.

This grave disease has been combatted by very various means and medicines, especially by alcoholics. And there is no doubt that very strong alcoholic drinks suffice, in certain women, to arrest the vomiting. The experiment has been made to ascertain their *modus operandi*, but I am unable to tell you by what mechanism they act. This medication, however, like the others, is often inefficacious; the disease progresses, and the women perish or abort.

Five years ago, a lady, pregnant for the first time, who for six weeks had vomited both liquids and solids, called in M. Bretonneau. He found the patient in a most alarming state; the affection progressed very rapidly, and threatened to become inevitably fatal. An accident put M. Bretonneau upon the right track. This woman when questioned complained of sharp uterine pains. In a primipara, the fibres of the uterus are not broken in, if you will allow the expression, are not habituated to the process, and allow themselves to be distended with difficulty; and it is this which causes the pain. M. Bertonneau thought that the uterine pains were the cause of the other symptoms, and that if he succeeded in mastering them, he would overcome the sympathe-

tic vomitings of the patient. Acting upon this idea, he covered the hypogastrium repeatedly with a mixture of belladonna; the vomitings ceased the same day, and recovery ensued. Sometime afterwards, he had occasion to observe another case where the pains of the uterus did not exist; but he thought that even if the brain did not perceive the pains of the uterus, the ganglia might take note of them and reaction occur. To modify these accidents he believed it sufficient to prescribe the belladonna mixture, and was again gratified with complete success. The result of these and similar cases justifies him, he thinks, in laying down the following principle:

Whenever in a woman, pregnant for the first time or many times, vomitings supervene during the course of gestation, frictions should be made upon the hypogastrium with a mixture of belladonna, and the vomitings will cease.

About a year and a half ago Dr. Ems called me in consultation in the neighborhood of Versailles, and after we had examined a patient laboring under rheumatism, he spoke to me of a woman who gave him great uneasiness, and who appeared to be going to die of hunger. This woman, he said, was in the seventh month of her pregnancy; her stomach was totally unable to bear anything, and she was in what seemed a hopeless state. I told him of the treatment of Bretonneau in such cases; he tried it; the next day the vomiting ceased; the patient was able to take aliment, reached the full term of her pregnancy, and gave birth to a child. It is now six months since Dr. Ems related to me this fact, at which time he cited me another patient in a similar condition, whom he had also treated with success by the same remedy. Dr. Duclos has seen two women attacked with obstinate vomitings, in whose case all medication had failed till he used the belladonna, which, true to its end, cured them.

In what manner does the belladonna act? I confess it is impossible to determine. Can it be supposed that the fœtus in being developed, painfully distends the fibres of the uterus; that the vomitings are sympathetic, like those which super-

vene in cystitis, for example? This is possible. Whether it be this or something else, it is upon this hypothesis that M. Bretonneau has employed his remedy. He has promulgated his theory, and has endeavored to confirm it by facts. The fœtus distends the uterus; the nervous ganglia take cognizance of it, and sympathetic vomitings are the consequence. This is his theory, which you may adopt or not, but which you must all admit conforms with marvellous exactness to the therapeutical results.

The case which occupies us is neither so clear nor so well marked as the others. The patient has had diarrhea for four months, a sensation of a hot iron and scaldings in the stomach, vomitings, but she had none of these in a preceding pregnancy; it is important not to confound the vomitings which supervene in gastro-enteritis with those which are sympathetic with the uterus. That the vomitings in the case before us are sympathetic is possible, but I do not venture to affirm that it is so.

The remedy of such seeming efficacy in the cases described, will possibly fail here. I am going to assume that there is a gastro-intestinal affection—to suppose that there is excess of development of acid in the stomach and the superior portion of the small intestine, and for this employ magnesia. This substance in contact with it saturates the acid, and modifies the organ in such a way that it secretes less, and the burnings of the stomach disappear. If the gastro-enteritis disappears and the vomitings persist, I will suspend the magnesia, concluding that the vomitings are sympathetic, and will proceed to the confirmation of my theory by the method that I have pointed out to you. It is of great importance to discriminate clearly and correctly, as you see, for the medication may appear bad, while it has only been improperly employed.

*Rheumatism Cured by Quinine.*—A woman, five weeks after delivery, entered the wards of M. Trousseau a short time ago, laboring under an attack of acute articular rheum-



tion, which had commenced five days before. The heart was not involved, there being no symptoms of either endocarditis or pericarditis, though to a very violent fever there was joined hydrarthrosis of both knees, and swelling of the sheaths of the tendons of the feet.

Without any previous medication having been employed, sulphate of quinine, administered from the second day of the entry of the patient into the hospital, procured, in the space of four days, a marked amelioration in her condition. Incapable of doing so before, she was able to walk on the fifth day, at which time the fever had disappeared, and scarcely any fluctuation could be felt in the articulations.

M. Trousseau remarked: Here, now, is a rheumatism which has been cured in a very few days. But it is by no means the case that things usually pass thus; most often the symptoms persist during three weeks, more or less. When the rheumatism improves you must pursue the same therapeutical course as in intermittent fever; if you immediately stop the administration of the quinine there will be a relapse, and you must never forget that relapses often last longer and are more rebellious than the original attack. This return of the affection is to be prevented by the administration of quinine in the same doses, at intervals of two, three, and four days, and continued after the subsidence of the pains in a preventive manner.

You should act upon the idea that rheumatism is not a local affection, and that an individual is not cured when the pains have completely disappeared. We see the buffy coat persist so long a time, that we are obliged to employ medication against the rheumatism which would still appear, and it is in this point of view that the continuance of the quinine is important in such cases.

So long as the patient has sweats and his appetite does not return, and there is something wrong in the pulse, you must treat the diathesis. When we employ venesection, we do not treat the rheumatism; we occupy ourselves with the diathesis, in virtue of which the liquids and the solids take on

rheumatism. When we make use of quinine we attack the whole economy—and that particular condition of it called diathesis, out of which the pains and other phenomena in the articulations arise. The diathesis may persist two or three years after all manifestations have ceased, and we are obliged to act against it in the same manner that we act against the syphilitic, scrofulous, and other diatheses when the other manifestations have disappeared.

The same rule is applicable to the miasmatic febrile diathesis; that is to say, to that diathesis in virtue of which an individual possesses within himself the conditions necessary for the production of intermittent fever. A man inhabits a marshy country and quits it without ever having had intermittent fever—he settles in a district where the fever has never existed, and three or four months after he does so he is attacked with intermittent fever. Why is this? Because he preserves the febrile diathesis. At the end of a certain time this individual is relieved of his paroxysms by the sulphate of quinine, but is he cured of the diathesis? No. If you suddenly cease the quinine even when the paroxysms have not been seen for eight days, the fever returns; from whence you see that the disposition by virtue of which the individual had intermittent fever, the diathesis, still exists. It may be most correctly compared to the rheumatismal diathesis, and if it be the rule in the one case to insist on the employment of quinine during three months or more, you must comprehend that the same is required in the other, whether it be a little more acute or a little more chronic.

*Chloroform.*—After my long letters on Ether, I deem it useless to say much of Chloroform, as an agent to allay pain in surgical operations. Suffice it then, to say, that chloroform has completely supplanted ether in the Paris hospitals; that the surgeons are unanimous in according to it a decided superiority over this substance—a superiority consisting, briefly, 1. in its more agreeable taste and odor; 2. in its being less irritating than the ether to the air passages; 3. in its desired

effects being more speedily obtained, more complete, continuing for a greater length of time, and passing away when they once begin to do so more readily than those of ether; 4. and lastly, its more simple mode of administration, no apparatus appearing to succeed so well as the simple concave piece of sponge.

*Eschars of the Sacrum.*—From the time that M. Blandin was a student of medicine, he says he was struck with the sudden manner in which eschars of the sacrum often produce death, and the important fact was referred to in his Surgical Anatomy twenty-two years ago. In a late clinical lecture he remarked, that he believed he had found an explanation of the fact in the following circumstances:—the point which suffers most from pressure in the dorsal decubitus is that which corresponds to the union of the sacrum and coccyx, which is precisely the point where the vertebral canal is formed only by the posterior sacrococcygeal ligament. This disposition of things allows the sphacelus to reach with great ease the *cul-de-sac* of the arachnoid; from whence the cavity of this membrane is opened, and the air, pus, and sanious matter penetrate. From this there results a violent inflammation which produces the phenomena of paralysis in the rectum, bladder and inferior extremities.

While showing the gravity of eschars of the sacrum, M. Blandin urges the precautions by which they are to be avoided, consisting in unwearied care, cushions, etc. etc.

*Comparative advantages in Children of Lithotomy and Lithotritry.*—The opinion of M. Guersant, Jr., of the Hôpital des Enfants, concerning the comparative advantages of Lithotomy and Lithotritry in children, is summed up in one of his clinical lectures. After having successfully lithotritized a boy of seven years old, he remarked: The question here presents itself, whether one should prefer in children lithotomy or lithotritry? Some time ago I presented to the Academy of Medicine a comparative table of which the following is the sub-

stance: of 51 calculous children that I have seen here, I have lithotomised 37. Of this number 30 recovered and 7 died; but four of these died in consequence of an intercurrent disease. I have lithotritised 8; 5 of these have recovered and 3 died; but only one died on account of the operation. In the remaining six the calculi were seated in the canal of the urethra, and I had no difficulty in removing them.

You will remark that so far as my experience goes, the results have been equally fortunate in the two operations; nevertheless I must express my preference for lithotomy when the calculi are voluminous, and lithotritry when they are small. I know that lithotritry offers certain inconveniences; thus, for example, it sometimes happens that there remain after the operation fragments of considerable size, and that, the neck of the bladder being easily dilated and the emission of urine being performed with force by children, the fragments may become engaged in the canal, in such a manner as to be incapable of either advancing or retreating, and thus render a new operation necessary. But this, we think, does not happen sufficiently often to justify our relinquishing the aid to be derived from lithotritry.

*Prussian Blue in the Treatment of Neuralgias.*—Prussian blue, a double salt which has received the names of ferrocyanate, double cyanate of hydrate of iron, etc., has never been very greatly employed by physicians. It is, says M. Bouchardat, a very important product for dying, but inert in medicine. This author adds, that it was once extolled in the treatment of intermittent fevers, in doses of from one to ten grains; as also in chronic diarrhea, in doses of one or two scruples; and in epilepsy, in doses of from six to ten grains. The sway of this salt soon passed away, and has never since revived, owing partly, perhaps, to its having been over-praised. M. Rayer has, however, been experimenting with it lately, and, it appears, with a success which has induced him to continue and extend his trials. This celebrated physician does not employ it in the large doses I have mentioned, but confines himself to the administration

of it, in the form of powder, in doses of from one grain to one and one-fifth of a grain, which he continues for one or two months. The affections in which he has exhibited it belong to the order of neuralgias—principally those of the face—and cephalalgias.

Although this medicament has not been used to a sufficient extent to warrant us in pronouncing with any confidence upon its complete efficacy, in diseases so rebellious as the neuralgias, its use appears to have been followed by some decidedly beneficial, without any unpleasant, results.

*Acupuncture in the Treatment of Blemishes of the Cornea.* A Spanish Medical Journal, the *El Regenerador*, mentions that a Dr. Perez has used acupuncture in the treatment of a number of cases of spots of the cornea, with great success. The following is the manner in which he proceeds: The patient being placed as for the operation of cataract, the surgeon fixes the eye, either by an instrument or by means of the finger of an assistant. He then takes the needle, and holding it like a writing pen—(sometimes he plunges the extremity in a solution of 12 drops of prussic acid to 3 scruples of distilled water) he introduces it at a very acute angle, of  $2^{\circ}$  to  $4^{\circ}$ , at each of the extremities of the diameters of the cornea, at half a line from the union of this membrane with the sclerotica. He carries it sometimes to the second order of lamella which constitute it; sometimes to the membrane of the aqueous humor, and sometimes to the crystalline body. The needle is always allowed to remain in its place during a space of time varying from two to five minutes.

After having withdrawn it, it remains to combat the accidents of reaction according to the degree of their intensity.

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ART. III.—*Notes on Medical Matters and Medical Men in Paris.*  
By DAVID W. YANDELL, M.D., of Louisville, Ky.

I am gratified to be enabled to present to the readers of the Journal the Lectures of Professor Dubois, on Hemorrhage in the last three months of pregnancy, delivered during the past month, at the *Hopital des Cliniques*. They number four in all, two of which I shall embody in this, and the remaining two in my next letter.

Since the beginning of December last, five women in our wards have offered uterine hemorrhage, occurring at an advanced period of pregnancy, with the exception of one case, in which the accident came on at about the fifth month of gestation. In some of these cases hemorrhage was renewed during labor. In the case of three women it may be attributed

to an *accidental* cause. In the first to a fall on going up stairs, the abdomen coming in contact with a step. In the second to a violent paroxysm of coughing. In the third to a violent emotion. In the two remaining cases the hemorrhage was owing to the insertion of the placenta over the internal orifice of the cervix.

We have therefore to study three cases of *accidental* hemorrhage, and two cases of spontaneous or *unavoidable* hemorrhage. Let the cause have been what it may, accidental or spontaneous, there remains a constant fact throughout all the cases, viz: that in every one there has existed a separation of the placenta. We can therefore advance that *loosening of the placenta* has, in all these cases, been the *proximate* cause of the hemorrhage.

One of the females was a primipara; the four others were pregnant for the second, the third, the fifth, and the eighth time. One of them was brought to bed about the fifth month, two at the seventh and eighth months; and two at eight months and a half. Those with whom hemorrhage was spontaneous were delivered; the first at the eighth month, and the other at eight months and a half.

In most cases the hemorrhage was renewed. In the case of accidental hemorrhage resulting from violent coughing, the flooding did not re-appear during labor; it was also suspended during parturition in the cases of *placenta prævia*.

In all those cases it was an easy matter to ascertain the peculiar cause of the hemorrhage, accidental or spontaneous; this knowledge was acquired by the touch and by questioning the patient. All the five mothers recovered very well; their five offspring were born alive—even the one born at the fifth month, though it is necessary to add that this latter only lived a few hours, for it was not viable. The whole of the five children were examples of head presentation.

The treatment was very simple. For accidental hemorrhage, the woman was kept quiet in bed and given cool acidulated drinks, and this was found sufficient. If hemorrhage did recur in two out of the three cases of this class, it certainly did not

present the characteristics of a real flooding, being but a small oozing of blood. In the cases of cervico-placental hemorrhage (*placenta prævia*) the same treatment was, first of all, resorted to; then, a little later, we had recourse to opening the membranes, which is certainly the best means of saving the life of both mother and child.

Such, said Prof. Dubois, are the cases that we have observed. They bring up all the questions relating to uterine hemorrhage. It is not, however, my intention to investigate the whole of these; but I shall rather confine my remarks to the most prominent points in the history of those hemorrhages which occur during the last three months of pregnancy.

The phenomena we have just noticed as having been recently observed by us belong to the *external* or *apparent* hemorrhages. You will infer from this remark that there exist other kinds of hemorrhage. On this subject allow me to offer a word of explanation. In the five cases we have had under our care, hemorrhage was due to a rupture of the connexions existing between the ovum and the uterus, and the blood was enabled to flow through the genital organs and appear externally. But it might have so happened that the blood would not appear externally; its effusion might have been confined between the uterus and the placenta; under which circumstances it would have been termed *internal hemorrhage*. As this is both an interesting and curious scientific point, and one which you all know has given rise to no small amount of discussion, you will bear with me while I attempt to develop its more important features.

First of all then, hemorrhage following upon the rupture of vascular connexions existing between the uterus and the ovum, can take place inside the placenta itself, in the proper tissue of this organ; it is then called placental apoplexy. On the other hand, the apparatus which unites the infant to its mother may become ruptured in some part of its continuity—at the umbilical cord, for instance, either from the isolated vessels being spread over the membranes, or from a laceration of the funis effected during a manœuvre. Hence will arise various species of internal hemorrhages. They may be all inclu-

ded under the single term *intra uterine*; at the same time, however, they admit of sub-divisions, founded on the peculiarities of the case, into *simple intra uterine*; *intra placental* or *intra amniotic*.

Professor Dubois after promising to revert to this subject in its proper place, proceeded to treat of the cases which, properly speaking, belong to the present lecture. Before doing so he remarked, that he felt it incumbent on him to meet a consideration which undoubtedly would arise if it had not already arisen, in the minds of his hearers; viz: that in so short a time we should have witnessed so very large a proportion of these hemorrhages; five cases having occurred in the course of five weeks, which is in the proportion of five to one hundred and four cases of delivery; that is, one woman out of twenty delivered has been subject to hemorrhage. You must not believe that such is by any means the usual course of things. The excess, in this instance, is due to the circumstance of many of these women having been brought to the hospital for the hemorrhage alone, who, had that accident not occurred, would have remained at home to be delivered. This large proportion, this exalted figure that we have obtained, belongs therefore to a population far more numerous than that formed by the sojourners in this establishment. You find in this fact the reason why good statistics cannot be gathered in special establishments like this hospital, where difficult cases abound, if we compare what passes here and what takes place in ordinary practice.

Of the five cases of hemorrhage that occupy us, the subject of one alone was a primipara. But this fact, however, important might be its signification under other circumstances, possesses but little weight in the present case, for the reason that we have embraced in one group both accidental and spontaneous hemorrhage, and that primiparæ and multiparæ indifferently, are exposed to these accidents. Still it is satisfactorily established by the statistics of Professor Simpson, on this point, that spontaneous hemorrhage is much more frequent in multiparæ than in primiparæ. Thus, out of eighty cases of spon]

taneous hemorrhage, Professor Simpson has found eight women with child for the first time—that is in the proportion of one primipara to ten multiparæ.

Now with regard to the period of pregnancy at which delivery occurs, the remarks I am about to make, on account of the indiscriminate assemblage of various cases into one class, to which I have already alluded, are intended simply, and they must bear no other signification, to draw your attention to the remarkable coincidence existing between the period at which the two women with *placenta prævia* were delivered, and the period at which are delivered the greater number of women placed in similar conditions. This will be clearly shown by what follows. The two women in our wards laboring under this cause of hemorrhage were delivered, one at eight months, the other at eight months and a half—both, in other terms, at an advanced stage of their gestation. To those results I could add many others, derived from personal observation; but I will content myself at this time with acquainting you with the experience of Professor Simpson on this subject. Out of ninety cases, this gentleman found but three women who were delivered before the sixth month; the others were brought to bed as follows: five from the sixth to the seventh months: nineteen between the seventh and eighth months; nineteen from the eighth to the ninth month, and the forty-three others in the course of the ninth month.

You will remember the remark that I made concerning the late period at which spontaneous hemorrhage generally occurs. Baudeloque and those of his school, taking as a starting point an ill-founded opinion, insisted that this kind of hemorrhage ought not to occur later than the sixth month, or, at latest, the seventh month of pregnancy. This view originated in the idea entertained by those writers, that certain modifications took place at that early period by an incipient dilatation of the uterine orifice. From well authenticated facts we believe ourselves justified in asserting that such is not the fact, but that the lower segment of the uterus and cervix give way to the enlargement of the uterine cavity in the majority of cases,



only in the course of the ninth month. This opinion I consider as being far better supported than the one set forth by Baudelocque.

As to the *cause*, we believe ourselves justified in admitting, that in some of the cases hemorrhage came on accidentally, as from a fall, violent coughing, emotions, &c. I will revert one instant to this point on account of the denial by some authors, that the aforesaid causes can induce hemorrhage at an advanced period of gestation. I refer to Mesdames Boivin, Lachapelle, and M. Velpeau. These authorities found their opinion on the fact, that the uterus, in pregnant women, cannot separate that which is contained from that which contains, for the reason that the mechanical action is simultaneously and equally sustained by both bodies. But I beg you will remark, that this is only apparent. When we see, in a fall, the various parts of a body separated by a kind of sliding movement, we must admit that two bodies connected by a third one, of a less solid nature than those it is destined to connect, may be divided, one from the other, by the destruction of the uniting body. In the present case the two bodies are the uterus and the placenta; their connection is effected by means of a vascular tissue which must tear when a violent action depresses the uterine parietes.

Professor Dubois here related a case of a woman who while at the Maternité, had attempted to carry under her arm a folding bed on which there lay a mattress. Just as she made the effort she felt a sort of cracking sensation in the abdomen which frightened her a good-deal; a very short time afterwards she had a flooding, and it was easy, sometime later, to ascertain that the placenta had been detached at a considerable distance from the orifice.

With all these women, said Professor Dubois, the placenta alone was principally loosened, and this fact may be easily conceived from the following anatomical data. At an early period of pregnancy the ovum adheres to the whole internal surface of the uterine cavity by the medium of general vascular connections. These connections are in every way important

as they are called upon to contribute towards the development of the ovum by allowing its drawing from the surrounding surface the elements necessary for its growth.

At a more advanced period of gestation the important vascular connexions become limited to the adherences which are permanent between the placenta and the uterus, in such a manner that the separation of what may still remain of the old general connexions is followed by a slight effusion of blood in ordinary cases; although I do not mean to say that in one particular case, where the vascular element, instead of being atrophied as in the majority of cases it really is, it may not still retain sufficient permeability for the loss of a certain quantity of blood; what I wish to impress on your minds is, that in the great majority of cases abundant hemorrhage implies detachment of the placenta.

Here a question offers itself which sometimes perplexes the mind by the vagueness of the solution generally given to it; namely, which of the two individuals is it, the mother or the child, that loses blood during hemorrhage? From the very facts now under consideration we can in some degree elucidate the matter. Were the children of our five women born alive? Yes; they were all born alive, and we must add, that one out of the number was born alive at the moment its mother was growing cold and pale from the effects of severe hemorrhage; and, moreover, that this same child happened to be the one born under the most unfavorable conditions—that of not being viable. The child in question was born, as I have before said, at the fifth month, but did not live more than a couple of hours. From this fact alone we can easily divine, that the blood lost during hemorrhage, belonged to the mother alone and in no wise to the fœtus. It is from the inner side of the uterus that the blood issues forth, although laceration of the uterine surface of the placenta may also cause a loss of blood to the child. I will ask if, hitherto, in cases where hemorrhage had placed the mothers life in danger, the children have been found deprived of blood? no; certainly not; on the

contrary those children always appear full of blood and even congested.

Professor Simpson has adopted the view that the blood issues from the loosened portions of the placenta, and that it takes place without the fœtal existence being endangered. Professor Simpson alludes to the fact of the existence in the placenta of a fœtal portion and a maternal or uterine portion in which the blood of the mother circulates through canals. "Blood," says Professor Simpson, "may be effused out of those canals, without there being any oozing of the blood from the uterine surface; the arteries of which are long and obliterated by laceration, and the opened veins themselves are closed up by a sort of membranous valve." Professor Dubois said that his experience led him to reject this explanation, and he would ask of Professor Simpson the question, whence the blood proceeds in hemorrhage occurring after delivery at a moment when there remains neither fœtus nor placenta *in utero*? If the blood is not furnished by the long, slender, and lacerated arteries, it must be then by the uterine veins; and these uterine sinuses,—those canals which constitute a real cavernous tissue,—whence would they receive their blood, if not from the arteries? I prefer entertaining the opinion that the undetached portion of the placenta keeps up circulation in the uterine parietes not only in that portion of them which corresponds to the adherent portion of the placenta, but also in that other portion from which the placenta has become detached. The blood thus called to the uterine surface, flows in an equable manner towards its whole substance, and is there effused when it is called to the part where the detached placenta can receive it no more. Hence the extravasated blood oozes downwards between the uterine parietes and the ovum, and when sufficient in quantity, appears externally at the genital parts. Thus it is the mother that loses the blood, and it is but in exceptional cases that the blood comes from a solution of continuity in any point whatever of the circulatory apparatus of the child.

In the cases of accidental hemorrhage we have had occa-

sion to observe lately, the appearance of blood did not take place immediately after the action of the determining cause. A few hours elapsed between the accident which produced the separation of the placenta, and the manifestation of the hemorrhage itself. Although this be the rule in cases of this nature, I think proper, nevertheless, to lay the fact before you in order to give an explanation of it. I say, in cases of accidental hemorrhage, it is rare to see the flooding follow immediately the cause which gave rise to it, and I add, that the fact is owing to the placenta being attached more or less in the vicinity of the uterine orifice; for there exists a well marked succession in the phenomena which then occur. The placenta is loosened first of all; then an effusion of blood is effected between the placenta and the uterus; then the effused blood glides down between the uterine parietes and the membranes; finally it passes through the orifice, down the vagina, and makes its appearance at the vulva. You will therefore understand that these phenomena being accomplished in the order in which I have described them, must require a more or less considerable space of time to reach their final manifestation—external hemorrhage—according to the longer or shorter course the blood has to follow. In two of the women who have come under our care, the placenta was situated far from the orifice; with the third one—she who fell on the stairs,—the placenta was not very distant from the os uteri; for this reason hemorrhage soon became apparent in the latter case. The circumstance of the hemorrhage not following immediately the action of the cause which produces it, will again be referred to when we come to speak of the diagnosis of this kind of hemorrhage.

In two of our cases the hemorrhage was at first suspended, and then reappeared during labor; in the third case the hemorrhage was arrested by the simple means we have already alluded to, and it did not again occur. This course is the natural one, and forms the principal characteristic sign between this class of hemorrhages and that designated by Madame Lachapelle *cervico placental hemorrhage*.

Another circumstance worthy of remark is, that the hemorrhage although suspended, nevertheless brought on premature labor; that is, at five months, seven months, and eight months and a half. This is owing to the effusion of coagulated blood between the uterus and the ovum having determined certain changes which have roused the uterine contraction; and it is worthy of being remarked, also, that labor was not induced immediately after the first appearance of the blood. If things did not take place in that manner, it is probably attributable to the effused blood being in those cases insufficient to bring on contraction; or else the uterine parietes having at first proved insensible to the irritation caused by coagula.

If, now, we come to examine what passed in the two cases of cervico-placental hemorrhage, we find that in one case the flooding was often repeated before the end of the eighth month, at which period the woman was delivered; and that in the second case the first appearance of blood took place at eight months and a half, and that this woman only flooded that single time. There certainly is a most remarkable difference between these two cases. It would be natural to think that in one instance labor had been brought on by the abundant and reiterated floodings, while in the second, that gestation had attained a more advanced period by the fact alone of the hemorrhage being moderate; but we must here call in another cause, *uterine excitability*, which was much greater in one case than in the other.

You will remark, that in cervico-placental hemorrhage there are repeated floodings, separated from each other by intervals, during which there is but a slight oozing of blood, more or less marked. This kind of hemorrhage differs, therefore, in its course from accidental hemorrhage, which has been suspended, or at least, only manifested its return, in two cases, by a slight oozing, while in the third case it did not reappear at all. This is owing to the cause of cervico-placental hemorrhage being a permanent one. The modifications undergone by the uterine orifice cause it to withdraw gradually and continually from those points of the placenta to which it adhered,



so that the flow of blood is, in some measure, continually kept up.

In the case of *accidental* hemorrhage, on the contrary, the cause is temporary. There is no reason why the flooding being once suspended should be renewed, unless very active circulation or a certain general state of the body should help to overcome the resistance which nature alone, or aided by art, opposes to this kind of hemorrhage. This natural resistance is the general hæmostatic means opposed by nature and favored by art in all cases of hemorrhage. I mean the deposit of coagulated blood at the ends of the divided vessels, and which arrests the ulterior escape of blood. I dwell upon this fact because it cannot occur in cervico-placental hemorrhage. What we have said of the mechanism of the latter will lead us to understand that the action of this hæmostatic means could only prove in similar cases, to be of a temporary, and therefore, of an insufficient nature.

As to the possibility of stopping hemorrhage dependent upon *placenta prævia*, by other means, I shall revert to this point a little later.

These two cases do not suffice, said Professor Dubois, to give you a complete idea of this kind of hemorrhage. Allow me to add some peculiarities drawn from facts of a similar nature. Thus we might have met with a phenomenon which we were not called upon to witness in our two cases, that is the sensation of a sort of cracking noise which precedes the manifestation of hemorrhage. Again it is not impossible that, in certain cases of *placenta prævia*, the hemorrhage should only occur once,—that the hæmostatic means should be successful in putting an end to the flooding. There are cases in which the edge of the placenta is inserted over the orifice of the uterus, and it may easily be conceived that if, with such a disposition of parts, a clot should obliterate the loosened part of the placenta, dilatation might continue without destroying any further connections. Thirdly, other cases might have offered to your observation of repeated floodings, succeeding one another at very short intervals, during which there continues an

oozing of blood, these losses of blood not being followed by uterine contraction, and the patients becoming pale and œdematous. Then you might have witnessed the nervous accidents properly belonging to patients weakened by a considerable loss of blood; you might have seen labor effected during a copious gush of blood. Then again, labor might have been induced by one single flooding, delivery being effected in the midst of a sudden discharge of blood. You might have witnessed the death of the child born in a similar condition, and also the death of the mother a short time after delivery; and last of all, you might have been present at an overwhelming hemorrhage which would have taken off the patient before she had time to be delivered.

Such are the cases you might have been called upon to see, gentlemen, if it had been your lot to attend a greater number of examples of this nature. Such are the elements which are ordained to fill the measure of your instruction, and complete the extent of your experience on this subject.

*Diagnosis.*—The diagnosis of this kind of hemorrhage, easy for the cases which it has been our lot to observe, may, however, include several important points which must be taken into consideration. The first point consists in determining the source of the flooding. The solution to be given to this problem is easily conceived when we know that the blood which appears at the vulva at an advanced stage of pregnancy may have many sources, and be quite foreign to the connection which unites the ovum to the uterus. Thus the blood may come from the internal surface of the external parts of generation, as it has been seen to do in cases of laceration of those varicose veins which lie on the inner side of the labia majora. The rupture of similar vessels may take place along the vaginal parietes also. The loss of blood might equally arise from a pathological state of the cervix.

Professor Dubois here quoted the case of a woman with whom, said the person who described the case in a letter, there existed hemorrhage due to placenta prævia. Professor Dubois found in this case, that the external surface of the cer-

vix offered numerous granulations, adhering to the tissue of the organ itself, and giving to the touch the sensation of placental cotyledons. There existed in this case a cancerous affection of the cervix, which had proved to be the cause of the flooding.

The second point to be examined in order to elucidate the diagnosis, consists in ascertaining whether hemorrhage is due to *accidental causes* or to *placenta prævia*. This question will be answered by the interrogation of the woman and by the touch.

By gathering from the woman the history of the case up to the moment of our investigation, we endeavor to establish the period of pregnancy attained when the hemorrhage first declared itself; and to learn from her if she is able to attribute the flooding to any appreciable cause.

By the touch we endeavor to find out,

1st. Whether there exists any lesion which might be taken for the separation of the placenta from the uterus, and

2d. Whether in cases where the hemorrhage has evidently its source within the uterus, the insertion of the placenta is near to, or far from, the orifice.

In some of the cases which form the subject of these lectures, we have been able by the *touch* to ascertain that the placenta was not present over the orifice, by the fact that the finger introduced into the os uteri met with membranes and sometimes with the head of the fœtus; moreover, in one case we were able to feel the sutures and the fontanelles through the thin, distended lower segment of the uterus. On the other hand, in one case out of those which now claim our attention, the placenta itself was felt seated inside the cervix; and in the other case we have found, at the orifice itself, a certain thickness of membranes and a peculiar spongy state of the part examined, which if they did not constitute a positive sign of the presence of the placenta, were, however, strongly indicative of it.

But now let us resume each of the elements of the problem, in order to appreciate their full signification. To return to the interrogation of the patient: why is it that we endeavor

to learn the precise moment of the manifestation of the hemorrhage? Because it is at a period of pregnancy pretty well determined that we see occur the floodings due to placenta prævia.

Now that this element of the question is found in all cases, we cannot say is positively true, for we should be contradicted by two out of our three cases of accidental hemorrhage, in which the flooding took place at a period when it generally appears in cases dependent upon placenta prævia.

Then, again, why do we endeavor to ascertain, from the woman, if any cause easily appreciated by herself, has produced the hemorrhage, if it is not to elucidate the history of the case by the addition of this other fact, that the flooding appears to be spontaneous in cases of placenta prævia?

Now can the touch throw light upon all these questions? Unfortunately we do not find it capable of doing so. First of all, in primiparæ, the os uteri remains closed up until near the term of pregnancy, and allows, nevertheless, a considerable quantity of blood to ooze through, without the finger being able to detect the presence of the placenta over the lower segment of the uterus. The diagnosis will be rendered more difficult still, if, desirous to judge of the thickness of the membranes or of the lower segment of the uterus itself, we find neither the head nor any other prominent and solid part of the fœtus, to serve as a point of contact by which, owing to the propulsion of the finger, we can measure the thickness of the intervening parts.

Another circumstance which may sometimes offer a temporary but real difficulty in the diagnosis, is the presence of a clot of blood in the cervix. At the moment we present the finger to ascertain the nature of the hemorrhage we find the flooding ceased and the os uteri closed up by clots. It is in similar circumstances, we must learn to yield to a natural effort, and that we must know how to temporize in presence of a plug made by nature. It has been said if blood flows in greater quantity during a contraction of the uterus, that it will be a sign of cervico-placental hemorrhage; this precon-

ceived idea, which would seem to mean that, in such cases, the hemorrhage had its source in the placenta more or less compressed by the contracting uterus, is by no means borne out by experience. There is no doubt but that the contraction of the womb will squeeze out the blood with more vehemence, but that phenomenon will take place let the blood proceed from whatever source it may, so long as it comes under the action of the uterus.

I have passed now in review the difficulties of the diagnosis, though it must be confessed those difficulties are of an exceptional nature, and one may, with prudence, care, and experience nearly always arrive at the knowledge of a placenta placed over the os uteri, but not so frequently when the placenta is grafted into some of the neighboring points of the uterus.

The result, I have said, has been fortunate both for the mothers and their children. But on this score we must not be led into erroneous opinions by the cases observed in our wards;—first, because those cases are not numerous; secondly, because in this limited number of cases we have three of accidental hemorrhage, and these are seldom of a serious nature; thirdly, because in one of the cases of placenta prævia the figure of the placenta was such as to allow its detachment to be effected principally in a point where there existed a membranous expansion between the vascular portion, which was indented like the figure of a heart. In this singular case, therefore, very few vessels have been lacerated during dilatation, and the hemorrhage may have been much less serious owing to the anatomical disposition of the placenta; fourthly, because those cases happened in our wards at a moment when the sanitary condition of the hospital was in every respect satisfactory. At first sight of the matter one might be inclined to think that hemorrhage occurring at the moment of labor ought to obviate or at least diminish the danger of ulterior inflammation. But it is not thus that things terminate; the contrary, even, is the general law. The women who have lost a great quantity of blood are far more exposed than others to



fall ill during the puerperal state, and with less chance of recovery, as they are already brought very low by the loss of blood, and unable to sustain, to any extent, the antiphlogistic treatment. In short, those women are the most liable of all, to fall victims to puerperal fever.

You might also be led to believe from what you have recently seen at the *Clinique*, that we have had to deal with accidents of minor importance. Be persuaded to the contrary, gentlemen; hemorrhage occurring in the last period of pregnancy is the most serious, the most dangerous accident that our profession ever encounters. Thus in 389 cases of hemorrhage collected by Professor Simpson, there occurred 133 deaths, or one woman out of three. The average of deaths amongst the children of these women is also one out of three. These, you will remark, are results equal to those found in the gravest diseases. Death, during or after hemorrhage, may be due to various causes:

1st. *Repeated flooding.* 2d. *Obstetric operations*, rendered necessary by the accident and practiced with the view of saving the mother or the child. 3d. *Derangement produced in the placento-fœtal circulation by the child itself.*

I must remark, as relates to this latter cause of death, that it is not indifferent for the child, whether the placenta should be placed in the lower segment of the uterus, or higher up in the cavity of the organ. The body of the child which has a tendency to occupy the declivity of the womb, presses, principally, during the standing position on the lower segment of the uterus and on the placenta when the latter is inserted in that region of the uterus. The placento-fœtal circulation must be more or less deranged by the compression exercised upon it. If you question a number of pregnant women, you will learn that in certain attitudes, during decubitus, for instance, the fœtus becomes at times so turbulent that they feel obliged to change their position. There are many reasons to believe that this or the other position only becomes uncomfortable to the fœtus when there is some derangement in the fœto-placental circulation.

The children who were born of the two women which presented examples of placenta prævia, offered head presentations. This is a rare occurrence in cases of this nature, for the insertion of the placenta over the orifice is a predisposing cause to abnormal presentations. Thus, Professor Simpson, out of 91 cases has found 21 trunk presentations. This may be attributed to two causes; 1st, the children are often born in a state of putrefaction, on account of death produced by the compression just alluded to, and in that case the presentation is nearly always abnormal: 2d, in order that a child may pass through the brim, it is necessary, first of all, that the inferior segment of the uterus should begin by placing itself in the brim, and then the concavity of that segment so placed receives the vertex, &c.; but when the placenta occupies the lower portion of the uterus, the head of the child has no tendency to rest on a filled up or flattened concavity. Hence occurs what happens in a case of malformed pelvis, in which the head cannot place itself with ease, but turns away from the obstacle, advances with greater facility on one side of the upper pelvis, and by that manœuvre, a presentation of the extremity of the ovoid is converted into one of the lateral region, right or left of the fœtus.

This letter ought to have gone to you by the last steamer, but the political commotion, of which Paris has just been the theatre, arrested the mails and I was unable to get it off in time. The revolution appears to be complete, and all for the present is order and peace. A week ago Louis Phillippe abdicated the throne; Paris was never more profoundly tranquil than to-day.

Paris, March 1st., 1848.



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**ART. I.—***Notes on Medical Matters and Medical Men in Paris.*—  
By DAVID W. YANDELL, M.D., of Louisville, Ky.

The following interesting case occurred in the wards of M. Hugier, of Lourcine hospital, whom, you will remember as the author of the lecture on Catarrh of the Uterus, which I sent you some months ago.

*A Case of Cancerous Encephaloid Neuroma developed in the course of the posterior Tibial Nerve.*

The patient, aged 28 years, is a seamstress, of a nervous temperament and very irritable. A tumor, ovoidal in form, of the volume of a foetal head at full term, projects on the internal face of the right leg, occupying the whole of its inferior third. Perfectly regular in all its points, its greatest diameter is in the vertical. It gives an obscure sense of fluctuation to the touch. Taking it between both hands a for-

ward and backward movement may be imparted to it, during which the patient feels no pain. But if it is attempted to move it vertically, especially from below upwards, the suffering is excessive, and increases with the degree of traction exercised. Further than this the patient complains only of a sensation of embarrassment and fatigue. The mobility of the tumor precluded the idea of its being attached by a pedicle to either of the bones. Before entering into a detail of the operation and of its results, it may be well to indicate as briefly as possible the etiology, commencement and progress of the disease.

"Fourteen years ago," in the language of the patient, "I fell from the top of a dung cart and sprained my foot. The pain and swelling which followed disappeared at the end of a few days. But six years after, while accidentally passing my hand over my leg, I felt a hard, rounded, painless, and moveable enlargement, about the size of a filbert. From this time I often touched it with my hand, and I am confident that for some years it did not seriously augment in volume. Within the last four years, however, it has sensibly increased; to day it embarrasses me, and I wish to be cured." To this the patient added that she was of a healthy family, that none of them, to her knowledge, ever suffered from any cancerous affection; and finally that she was the mother of a healthy family of children.

The only treatment pursued up to the day of the operation consisted in some bitter tisans; no topical applications had been made. About a month since, the introduction of a trochar gave issue to a few drops of bloody serum.

The patient being placed on her back, her right leg pronated, and insensibility being produced by the administration of chloroform, J. L. Petit's *garrot* was applied, and the operation performed in the following manner:

A longitudinal incision, exposing the internal saphena vein, was first made. A ligature was applied to this vessel in order to prevent hemorrhage; a second incision, perpendicular to the first, divided the posterior lip of this into two parts of



equal length. The flaps comprising the aponeurosis of the leg were dissected with care. This exposed to view a regular, shining, polished cyst, which allowed itself to be detached from the neighboring tissues with the greatest facility, except at its superior and inferior extremities, which were continued and held by a resisting prolongation from above downwards; the ligature was thrown around the entire mass, and the extirpation terminated with a pair of scissors.

Ligatures being thrown around some of the smaller arteries, the cavity occupied by the tumor was filled with balls of *charpie* sprinkled with resin; the edges of the wound were approximated by adhesive bands. Cerated linen, *charpie*, roll bandage.

After the operation the patient remained more than twelve hours wandering under the influence of the vapors of ether and chloroform.\*

Two days after, when the first dressing was removed, the wound presented a satisfactory aspect in its interior, but the borders were whitish and gaped largely. An unequivocal tendency to gangrene became manifest the following day, and increased in a very rapid manner.

Some days after, the patient died in an attack of delirium coincident with a gangrene of the soft parts, extending from the tibio-tarsal articulation to about the width of two fingers from the articulation of the knee, in the whole circumference of the leg. The periosteum was tainted, but the bones appeared perfectly healthy. The viscera were in their normal

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\* The patient at first inhaled ether which was without effect, sensibility disappearing only after the administration of chloroform, which was accompanied with violent convulsions. Still more violent convulsions followed the operation, and the patient remained many hours before completely recovering her reason. The convulsive movements which it seems *always* precede insensibility from chloroform, appear much more decidedly produced when ether and chloroform have been employed successively. Under such circumstances violent constriction of the chest, paroxysms of suffocation, prolonged delirium and vomitings, are observed. This is founded on three or four well authenticated cases.

state, and throughout the whole organism nothing pathological was found which could be legitimately attributed to the influence of the principal disease. The uterus presented so great an antifixion that its body formed a right angle with the neck; it was strongly thrown to the left of the median line, and as a set off, the bladder was slightly folded to the right. Should these displacements be attributed to the convulsive efforts of the organism before death?

It should be added, in order to be strictly exact, that one of the ligatures of the tibial nerve (the inferior) still existed after death; the other was detached the evening before. The two ends of the nerve were inflamed, but without any considerable augmentation of volume. The tumor was examined with care. Slightly flattened from before backwards, the superior portion of its external surface offered the appearance of the vestige of a pedicle, and from this point, as from a centre, shot out numerous white bands or strips, of a millimetre in size, which crossed the tumor longitudinally to terminate at the inferior summit of the ovoid. These strips and this protuberance, which gave to the cyst a pediculated appearance, are but the posterior tibial nerve divided into its multiplied filaments.

What is the nature of the encysted substance and that of its walls? The contained part is soft, encephaloid, porous, yellow, or, to speak more strictly, of a white ground, with yellow spots or patches; numerous cysts containing a sanguinolent fluid were found. The wall is a millimetre in thickness; its exterior is composed of many membranous leaves, of grayish white color, which slide upon each other with facility.

A question which it appears of some importance to decide upon is this: The pocket of the cyst, is it essentially constituted by the neurilemma, or does it owe its existence to the formation of an abnormal tissue? A minute dissection and an attentive examination, aided by a glass, showed that each nervous filament could be separated with the greatest facility by the point of the bistoury, until about the third of an

inch from the point where the posterior tibial nerve became a single fasciculus; but at this point, the adhesion between the nervous filaments or the neurilemmas and the parietes properly so called of the tumor were such that they could not be separated one from the other, except by the destruction of the tissues. Maceration in acidulated water did not produce any more satisfactory result. From this we may be led to believe, though it would scarcely be proper to affirm, that the sac was formed by a tissue distinct from the tissues which existed previously to the development of the tumor.

*Erysipelas.*—Notwithstanding the very numerous essays and treatises which have been written on erysipelas, there still appears something to be learned in relation both to its nature and treatment.

As regards local applications in the treatment of this affection, while Quain declares that *aqua fontis* is as good as any other and infinitely better than many, Velpeau claims the palm for the sulphate of iron; some one else will hear of nothing but the tincture of iodine, and Marchal is sincere in urging the virtues of a *pommade of nitrate of silver*.

So far as my own experience would go, I must say that I have witnessed patients laboring under erysipelas recover in the hands of Mr. Quain, at University College Hospital, London; others in the wards of M. Velpeau, at La Charité; others in Louisville under the use of tincture of iodine, and others again at the St. Louis and Val de Grace hospitals, in the wards of MM. Jobert and Marchal who are advocates of the nitrate of silver pomnade. And in London, Paris, and Louisville I have seen patients die who had been soaked in *aqua fontis*, and besmeared with sulphate of iron and nitrate of silver ointment, and discolored with the tincture of iodine.

The following report of cases, preceded by some remarks of M. Marchal, appearing to me interesting in several points of view, I have concluded to furnish it to your readers.

*Military Hospital of Val de Grace.—Cases of Erysipelas treated by the nitrate of silver.*—Between the 1st of December and the 19th of February last, there were twenty-three cases of erysipelas treated in the wards of M. Marchal, (de Calvi), of whom I have more than once made mention.

1. In respect to the seat of the disease, the twenty-three cases are thus divided:

In thirteen cases the erysipelas was seated on the face, and in four of these the disease was very grave.

In one case the erysipelas was observed on the neck.

In three the affection was established on the chest; in one it was on the inferior part of the trunk and thighs; in one on the knee; in one on the legs; and four were general.

2. In nineteen of these cases the erysipelas appeared in the hospital patients confined to the wards for other affections; in four alone did the disease occur in out patients, and in two of these latter cases it occurred in infirmaries of the hospital. It follows from this that if the epidemic influence is not confined to the limits of the wards, it at least prevailed with incomparably greater intensity within the hospital.

3. Touching the idiopathic or symptomatic nature of the erysipelas, in nine cases it manifested itself idiopathically, that is independently of any anterior local lesion; and in fourteen cases, sympathetically, that is, as consecutive on a lesion of the following kind, to wit:

In one case to the scarification left by cups applied around the knee for a hydrarthrosis; in two cases as a consequence of a seton applied to the neck; in four cases it followed blisters; in one case it supervened upon eczema of the upper lip; in one upon ulcerous marginal ulitis, and finally, in five cases it was consecutive to ganglionic and other abscesses.

4. Concerning the participation of the lymphatic ganglia in the development of the erysipelas—fourteen times the disease commenced by painful engorgement of the lymphatic ganglia, in the following order: In eleven of the sixteen cases of erysipelas of the face and neck, by painful engorgement of the submaxillary and cervical ganglia; and in the

three cases of erysipelas of the chest, by painful engorgement of the ganglia of the internal or thoracic wall of the axillary region.

The remaining nine cases not having been examined, it cannot be determined whether ganglionic engorgement did or did not exist.

Relative to this previous engorgement of the ganglia, it is important to distinguish two varieties—the one where they influence by neighborhood, or proximity, as occurred in the axillary ganglia in consequence of a blister on the sternum; the other, where they are themselves the seat of the local primitive lesion. An example of the latter variety will be seen further on in the case of sapper B., who was affected with strumous cervical ganglionitis, with destruction of the skin in various points, and fistulous canals, from which the erysipelas spread to the face and scalp. Another example is that of the first case which we shall report, where the erysipelas commenced by a suppurating inguinal adinitis, treated by puncture and iodine injection. We have seen that an ulcerating marginal ulitis may be regarded as the starting point of an erysipelas. In this case the erysipelas was produced by painful engorgement of the submaxillary ganglia. The ulitis was general, and both the erysipelas and ganglionic engorgement manifested themselves on each side.

When the two cases of *eczema labialis* occurred, M. Marchal mentioned a case that had been observed in the wards of M. Velpeau, in which an eczema of the dorsal surface of the two feet, in a robust man, gave rise to a chronic engorgement of the lower inguinal ganglia, which formed on each a tumor of the volume of a small orange.

It results from the above observations, that according to circumstances, which are not yet determined, a local lesion may produce either an angioleucitis or inflammation of the lymphatic vessels, which will present itself with the characters of erysipelas or a ganglionitis; and it is worthy of remark that, in the first case, when it is an angioleucitis which is developed, the inflammation commences in the ganglia, at



least as a general rule. From this it seems natural to conclude, that there is a common variety, even the most common of erysipelas, in which the inflammation affects the lymphatic plexuses.

The two cases which may arise in consequence of a circumscribed local lesion, a scratch for example, are the following:

*First*—Red streaks, stripes, or lines, will extend from this lesion to the neighboring lymphatic ganglia, which become engorged; the inflammation will gain first the vessels, then the lymphatic ganglia.

*Second*—The red streaks are not perceived, and the first observable evidence consists in the painful engorgement of the ganglia, after which the erysipelas is developed.

But between these two cases there is one which partakes somewhat of the nature of both, and in which there are red streaks, then a ganglionic engorgement, as in the first case, then a cutaneous phlogosis of greater or less extent, sometimes occupying a member, as in the second case.

And now, we ask, when we reflect on this triple evolution, is it not evident that in these three cases the inflammation does not quit the lymphatics, unless to be communicated to the subcutaneous cellular tissue, when the angioleucitis passes to the degree of diffuse phlegmon.

If it is true that erysipelas commences most frequently by phlogosis of the ganglia, it must also be true that erysipelas is an angioleucitis. Utter observation will decide whether the previous engorgement of the ganglia is not one of the differential signs of lymphatic and venous erysipelas. The special and œdematous clamminess which appears to accompany venous erysipelas, and which is perfectly explained by the obliteration of the veins,—a symptom which is wanting in lymphatic erysipelas,—constitutes another differential sign between these two forms.

We will conclude what we have to say on this subject by stating what we have repeatedly observed, viz: that when erysipelas is developed the ganglionic phlogosis which has

preceded it, generally diminishes and soon disappears. In the same way, when an adinitis is developed in consequence of a local lesion more or less remote, the red stripes which have produced it become, ordinarily, rapidly effaced.

The above are the considerations of M. Marchal as literally presented as may be. Believing it unnecessary to augment their length, we pass to the causes themselves and their treatment.

5. The treatment has consisted, in all the cases, in the application of the *pommade* of nitrate of silver in the proportion of two to four of the salt to twenty of cerate.

6. Twenty of the twenty-three patients have been cured, and three are still under treatment. One of them exhausted by constitutional syphilis and a chronic affection of the respiratory organs, gave us great uneasiness at the invasion of the erysipelas, which was developed in the seat of a blister on the chest. Truly unmanageable, after traversing the whole anterior portion of the chest, it reached the back, neck, and finally the posterior segment of the head. The patient is slightly stupefied, as in the commencing stage of typhoid fever. The pulse is extremely quick and wiry; the tongue, very red at the tip, is covered in its remaining portion by a thick, tenacious, yellow fur.\*

CASE I.—L., a fireman, entered the hospital on the 30th of December, 1847, for an indurated chancre of the ramus of the glans penis, and a double suppurating inguinal adinitis. M. Marchal remarked that suppuration of the bubo in a case of indurated chancre is an exception to the rule. Blisters on the tumor; iodine emulsions to generalize and excite the purulent discharge, and after some days, the abscess being well formed, puncture and use iodine injections.

January 10th. Pains are felt on the crest of the pubis; the parts were shaved and a painful tumefaction was discov-

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\* This man committed suicide.

ered accompanied by redness, which yielded to pressure. Fever, cephalalgia, anorexia. Seidlitz water.

12th. General symptoms more intense; the redness extended upwards to the umbilicus, to the antero-superior iliac spines of each side; slight tumefaction of the erysipelatous part; acute pains. Seidlitz water.

In the night, the erysipelas spread over the whole of the abdomen, to the base of the chest in front, and to the superior part of the thighs. The parts were covered with the nitrate of silver ointment in the proportions of four to ten.

The next day, phlyctænæ at various points; very perceptible diminution of both the pain and febrile reaction.

Two days after, the erysipelas was subdued, and desquamation commenced. Nevertheless, the fever, which had disappeared, came on again. The lumbar region was examined and found erysipelatous throughout its whole extent. Apply the pommade. The same result as in the erysipelas of the anterior parts, where the desquamation is almost accomplished. But soon, and it is well worthy of remark, the erysipelas was reproduced on various points of the abdomen. The next day all pain had disappeared. The patient occupying a bed in the corner of the ward, M. Marchal had him conveyed to a vacant ward.

20th. The erysipelas may be considered as terminated.

30th. The bubos and chancres are cured.

In this case, three attacks of erysipelas have yielded to the use of the pommade of nitrate of silver in the space of ten days.

CASE II.—R., a soldier of the line, entered the hospital on the 25th of January, complaining of pains which had existed for three days in the left submaxillary ganglia, which are engorged. Cataplasms.

26th. The whole of the left side of the face, and the integuments of the cranium are considerably tumefied; the eye is closed by the swelling of the eyelids; lively redness; intense pain; pricking heat; fever; cephalalgia. Seidlitz wa-

ter; nitrate of silver ointment of the strength of three to twenty. The scalp was shaved.

27. Amendment in his general condition; the erysipelatous part tumefied as in the evening before, is black.

28th. The right side of the face presents slight redness and sensibility; ringing in the right ear. Pommade to the right side of the face.

29th. The left side is cured; the right side, including the eyelids, is swollen and painful. Pommade.

30th. The swelling and pain only remain in the eyelids of the right side; the left side is in full desquamation.

31st. The cauterized parts have assumed their normal aspect, save here and there some dark stripes of the ancient epidermis. The new epidermis is white.

CASE III.—B., a soldier, entered the hospital on the 14th of January, for an eczema of the superior lip. Bitter tisan of oil of savin on the eczema; regimen.

21st. The right jaw presented a glossy redness, with slight swelling; uneasiness; painful twitchings during mastication.

22d. The erysipelas has extended to the inferior eyelid and right side of the nose; the redness more vivid, disappears under the finger; the pain increased by pressure; no engorgement of the submaxillary or cervical ganglia; no febrile reaction. Seidlitz water.

23d. The temple is invaded; the parts are more tense and more red; the patient has rested badly; cephalalgia; fever. Pommade, of three to twenty.

24th. Less pain; the engorgement has remained stationary; the cephalalgia has ceased; the pulse has regained its regularity.

25th. The tumefaction of the nose, temple, and superior eyelid has disappeared; the jaw alone offers a little swelling; the cauterized parts of an ivory black.

26th. Desquamation has commenced. **Recovered.**

The patient left the hospital on the 30th. The face retains no vestiges of the cauterization; the same was the case in the two preceding instances.

CASE IV.—M., a soldier, entered the hospital on the 25th of December, for a very intense inflammation of the cornea and conjunctiva, which appeared to be dependent upon a general strumous condition. Iodine emulsion was employed; blisters applied to the temples; different collyria were used; purgatives administered; finally a seton was passed into the neck.

On the 1st of January, the patient complained of stiffness in the neck, and pains in the angle of the jaw. On examining the parts, an engorgement of the submaxillary and superficial cervical ganglia of this side, very painful under pressure, was detected. The seton was discontinued. Seidlitz water. During the day, erysipelatous patches were observed in the left molar region.

CASE V.—Joseph B., ætat. 41 years, entered the hospital on the 17th of January, for an ulcerated cervical ganglionitis. He presents in the space comprised between the clavicle and inferior jaw, numerous ulcers and fistulæ, resulting from the ganglia. and from which flows an abundant serous pus. The wounds were dressed with aromatic wine, and on the 24th some commencing cicatrices were already observed, and around the ulcers an erysipelatous blush was discovered, extending downwards for a short distance below the clavicle, and superiorly, to the ear, which is also invaded. These parts and the neck are red, hot, somewhat tumefied and painful, especially on pressure.

Here I will remark, that there is not a better means than pressure to determine the limits of erysipelas affecting the scalp, which ordinarily offers very little or no redness. The touch, in fact, produces a very sharp pain, reveals the engorgement, and detects a very intense heat.



The general phenomena in our patient were slight. The febrile reaction feeble; no cephalalgia. The patient was put on diet. Gum water; pommade of nitrate of silver, 2 to 10.

25th. The erysipelas has extended to the whole left side of the face, upon the frontal and temporal regions, and the whole superior portion of the left side of the neck. There was further remarked, on the neck, a tumor resulting from an accumulation of the serum in consequence of the constant pressure of the head upon the pillow. The tumefaction stops at the root of the nose; the eyelids are untouched. The pulse is full, developed, and frequent. The local symptoms persist. Pommade.

26th. The erysipelas has spread over the eyelids of the left side, the entire nose, and the superior part of the cranium. Pulse frequent; skin hot and dry. The intellectual faculties remain clear. All the erysipelatous parts are anointed with the pommade, which was spread even upon the healthy teguments to arrest the progress of the hitherto invading inflammation. Diet.

27th. Notwithstanding the precaution taken the evening before, the eyelids and cheek of the right side are engorged and red. The left side, however, which was primarily attacked, has obviously improved. It is no longer painful on pressure. The patient says he has an appetite. He was allowed some prunes.

28th. The erysipelas appears limited. The skin of the eyelids is shining, tense, hot, and the patient is unable to open his eyes. He complains of a great desire to sleep, which he is unable to satisfy. The pulse is slow, 60 pulsations to the minute: appetite. Poor soup; pommade on the eyelids.

29th. The erysipelas is at its period of decline. The skin on the eyelids and jaws is wrinkled and shrivelled.—Same prescription.

31st. The parts attacked by the erysipelas have returned to their normal condition. The epidermis, blackened by the nitrate of silver, is being detached by patches. The cauterization has caused some scabs on the nose; no cicatrices

We see from these cases, that the pommade of the nitrate of silver does not arrest the erysipelas; but, that under its influence, it is extinguished as it progresses, and this is a very great object gained.

The discoloration is not a serious inconvenience, since it disappears with desquamation. It offers various degrees of intensity, according as the pommade has produced phlyctænæ or not. If there are phlyctænæ the coloration is grayish black. Frequently we have remarked that the tint of the cauterized part, after the fall of the epidermis, was whiter than before the erysipelas; twice, however, it remained discolored, at least during the stay of the patients in the hospital.

An inconvenience in the indiscriminate use of the pommade of nitrate of silver consists in the staining and speedy destruction of the sheets. This is obviated in part by making use of those that are old while employing the article.

To sum up: the pommade of nitrate of silver appears to have specially for effect, not to arrest the erysipelas, but to break its force, so to speak, by extinguishing it wherever it appears, and thus ward off the violent reaction which results from large inflammations. Further, it seems certain that under the influence of cauterization by this means, the propagation of the phlogosis to the interior of the cranium, in erysipelas of the head, is most generally prevented, and that when it does take place the meningo-cerebral complication is much less grave. This was manifested in case V. by a very great desire to sleep.

M. Marchal thinks that the pommade of nitrate of silver, used in much smaller proportions, would produce good results in the erysipelas of infants, the vitality in whom yields so soon to extensive erysipelatous inflammations.

While the Opera houses, for weeks after the Revolution of February, rang nightly with laudatory hymns to the people, odes to Liberty, sometimes composed in honor of that goddess, and dirges for exiled Royalty; while Rachel chanted

the *Marseillaise* at the then *Théâtre de la République*, formerly *Théâtre Française*, and Bouffet bawled the *Chant du Départ* at the *Variétés*; the crowded halls of the *Ecole de Médecine* echoed with the clear, ringing voice of Bouillaud as, in the capacity of Dean newly created, he returned his thanks to the students, to whom he owed his novel position, and swelled the chorus to his "ever fondly worshipped mistress, Liberty," in tones worthy his glorious theme; Piorry laid his offering on the same altar, and urged the students that while they spent their mornings in the hospitals, they should devote their evenings to their clubs; La Charité witnessed the brine creeping down the cheek of the newly fledged republican, Velpeau, as he looked over his wards and saw his "dear suffering fellow-citizens who had bled in Freedom's cause," and then heard, for the *first time*, the great head of European surgery indulge in *praise* of Republics, and grow eloquent as he drew the picture of *La belle France*, becoming still more beautiful and lovely under the genial rays of the sun of Liberty. And *Hôtel Dieu* better deserved its name as the noble old patriot, Rostan, sang hosannas to Freedom, and gave utterance to sentiments of true and loyal Republicanism, clothed in the garb of eloquence, and delivered with the same fire which animated his bosom in 1830, when he was among the foremost of those who, musket in hand, entered the palace.

The period of which I write was one of the most interesting that ever occurred. The political enthusiasm had affected all classes of society, and every member of those classes. The rich and the poor, the distinguished and the obscure, the devotee of science, and the artisan, all alike were affected, all were now political actors, political speakers, political writers, or political thinkers. Cræsus had quit his banking-house to shoulder arms or attend political meetings; the poor man, as eager to learn republican dogmas and hear republican addresses as the more fortunate, set aside his calling and, dressed in his new uniform, furnished his quota to processions of "freemen" and the *réunions* of his brothers; Science oc-

cupied a prominent seat in the Provisional Government; the artisan stood beside her.

All were members of *Clubs*. The professors had their clubs; the students theirs; the patients theirs, and all clubbed together to add fuel to the flame of political excitement, and gall to the bitterness of parties.

The hospitals were still open, and lectures continued to be delivered, but the former were usually but the theatres of political discussions, the latter the vehicle for communicating political doctrines. The dissecting rooms abounded in subjects, but the scalpel was laid aside for the sword, the apron for a military uniform, and the dead Frenchmen were unceremoniously pitched from the dissecting-table to make room for the foaming, living, burning demagogue.

I believe that I have read reports of the speeches of the representatives of all trades and professions, save our own. I do not remember to have seen in print any Republican discourses emanating from physicians. Thinking that your readers would possibly relax for a moment from stern science, and watch with interest the figure which one of their fellow-doctors made among the nation of new-born democrats, I have determined to furnish them with a brief report of a speech delivered by Prof. Rostan, at the opening of his clinical course at Hotel Dieu, on the 11th of April. It is as follows:

GENTLEMEN:—To-day we enter upon a new era. The most admirable of tempests has swept away the impurities with which we were soiled, and our regenerated country glows with radiant glory under the sun of liberty. (Prolonged bravos.)

I cannot resist the desire to communicate to you the emotions which I feel amid the imposing circumstances which surround us. The subject, too, is less foreign to our usual themes than might at first be supposed; it even forcibly leads us there; for, if the Republic promises us great good, it also imposes upon us high duties, and I should neglect my own if I failed to point out some of them to you.

The first good that the Republic gives, is *Liberty*—Liberty in all things, for all, everywhere—as necessary to the man who thinks and feels, as air and food, and without which life is an insupportable burthen.

Liberty has spoken in her giant voice. At its powerful and majestic tones thrones are shaken, Kings have tottered, and those who have not fallen still tremble and fear. And slavery, will it not soon be but a *souvenir*? (Applause.) Thus will be accomplished the destinies which Christianity has promised to nations for more than eighteen centuries.

We have finally conquered the liberties for which we have so long fought.

We have conquered the liberty of publishing our thoughts. The liberty of instruction. The liberty of association. The liberty of following our own religious banner; these precious liberties, often conquered and as often wrested from us, were obstinately denied and disputed us; may we henceforth preserve them! (Applause.)

But these liberties, are we to enjoy them without limits? Does liberty consist in exercising indiscriminately all our wills, all our caprices, regardless of how it may affect our fellows. No, certainly not; liberty thus conceived is not liberty; it is license, it is anarchy, it is the most cruel of all tyrannies; despotism is a hundred times preferable.

*Liberty is but obedience to the laws.*

Without the laws there can be no order, no repose, no happiness for nations. Brutal force is alone sovereign. Every excess, every crime is then possible; murder, pillage, incendiarism; nothing is respected, neither property nor the lives of citizens; and what bulwark can we oppose to these furies when the laws have lost their power?

Respect for the laws can alone then preserve liberty; the laws alone can reproduce security, confidence, public prosperity.

Honor to liberty, but to liberty based upon the laws!

Woe to those evil spirits who recognize liberty only in



license; it is the evil genius who inspires them, and they are the most cruel enemies of the country!

For the second good, the Republic gives us *equality*.—Thus, man regains the dignity of man; no more of these wounding distinctions, based upon unjust privileges; no more superiors, no more inferiors, no more classes of citizens so unfortunate as to be born under the dominion of other classes.

The Republic, more equitable than nature, the most just of mothers, effaces the distinction which she still allowed to subsist. The Republic recognizes the same rights for every citizen; the strong, in her eyes, has no more rights than the feeble. She protects the one against the encroachments of the other. All are equal before her. All may aspire to obtain the same employment, the same honors. Is this saying that he in whom study and labor have developed intelligence, industry or address; that he who may have defended his country by his courage; he who has devoted himself to the good of his fellow creatures; he who has rendered his country illustrious by the works of his genius; he who has honored it by his lofty virtues, will have no claims to distinction?

To say that personal merit will no longer establish a distinction among men, is to proffer a blasphemy subversive of every species of order and civilization. If all individuals are to be absolutely equal, if all are to have equal parts in recompenses, where will be the advantage of merit? Where will be the value of talent? From the moment when man shall have no hope of obtaining some advantage, some consideration, from that moment will he be indifferent of being a stupid ignoramus or an able *savant*. Who would wish to undergo the labor of acquiring this science to which it is necessary to sacrifice his vigils, his fortune, his youth, and his health? What is the good of study? What is the good of toil? Close the libraries, burn the books, destroy all these monuments henceforth useless to human genius. Sloth will have the same reward as activity, cowardice as courage.

selfishness as liberality, imbecility as genius, vice as virtue. (Applause.)

No more emulation, and therefore no more glory. Who would wish henceforth to become painter, sculptor, architect, poet, orator, since talent will no longer bring esteem, and will not be more honored than mediocrity?

But do you not see that you tend to plunge your country in the darkness of barbarism?

But France, whose children, eminently intellectual, have always marched at the head of civilized nations, France, who has always held the first rank in the arts and sciences, cannot wish to abdicate this glorious supremacy. She cannot consent to fall to the hindmost place in the social scale. No, gentlemen, this is not possible. There will always be in our beautiful country laurels for those who shall acquire in the productions of the mind a veritable superiority.

Let us say more; there is not, there cannot be incontestable superiority, save that of intelligence, enlarged by vigils, by labor, by study.

Labor then, gentlemen, if you would obtain distinction; acquire talent by your noble efforts, and let the country alone; she will know how to recognize and recompense your merit.

Henceforth there cannot be other nobility than intellectual and moral.

Perish the nation that shall misconstrue this sublime inequality, for she would be the most unjust and the most ungrateful of nations!

The Republic proclaims *fraternity*, touching law which unites in one band the entire human species; which considers it as one single being; the fraternity which prompts us to succor our fellow in misfortune; which makes us share his pain, his misery; which makes us rejoice in his happiness, in his success; fruitful source of exhaustless pity, of compassion, and of charity. Fraternity which dispels hatreds and jealousies, and fills the soul with the softest, tenderest sentiments! O! if fraternity is not a vain word what more is wanting to

people to be happy? What a divine soul had he who first called other men his brothers?

How is it possible not to love a government which inscribes upon its banners these three magnificent and holy words—

LIBERTY, EQUALITY, FRATERNITY?

Such a government, must it not be the most desirable of governments? And what other than that of the people by the people could give parallel results? The government of the nation by the nation, is it not, in effect, the most just of governments?

The nation is the collection of all the individuals scattered over the soil of a country; it is evident that they alone possess this country, that they are the masters with various titles. The nation, the people, that is every body, you, me, us, all, yes, *we* are the people!

The people is that which is.

It may say, *ego sum, qui sum*.

And hence, the people, is it not the only sovereign? Is it not the master to govern itself or to have itself governed as pleases it? From it emanates all power. Hence, is it not evident that those whom it charges with governing it are in one sense but its intendants? In monarchies even, *Kings are made for the people, and not the people for Kings*. (Applause.)

Let us never forget that the governing, the executive powers are but the instruments of the public will. The people can and should transact its affairs themselves. It is their inalienable right. Every other mode of government is evidently a usurpation.

And if the people have the right of self-government, of transacting their own business, if he whom they have appointed to fill this high mission does not do so, according to their desires, is it not evident also that the people, in their omnipotence, have the right to change him.

But if the people have the right of self-government, it is necessary that they obey. The gages of stability are in

obedience to the laws; without this passive, entire, complete, absolute obedience, there is no government possible. Let us all swear then obedience to the laws. And, moreover, what does it cost the people to obey since the laws will be their work? (Certainly—bravo! bravo!)

But, is it said that the representative government does not unite all the conditions calculated to insure the happiness of the people? In reply, we shall only cite the sad and unfortunate experiment that we have made. Was this government anything but an absolutism under another name?

The Charter had said—there are three equal powers:

The Chamber of Deputies.

The Chamber of Peers.

The King.

These powers should balance and equalize themselves, and work in an equal manner for the public weal.

What has been the case? The King, who should have had only one-third of the power, secured a second third in corrupting the Chamber of Peers; and not content with this, he weighed still upon the third power of the state by all the means which he possessed. The echos of the courts of justice ring still with the scandalous prosecutions, of a corruption of which we have been witnesses. Nearly half of the second chamber was composed of salaried functionaries, or of men who hoped to become so. Thus the executive power had absorbed the power of the two others. Would it not have been more loyal, more frank, if it had declared itself an absolute power? Was it else than a bitter derision—the pretending that the Chamber represented the popular interests?

The representative government thus denaturalized, was but an odious lie; it deserved to perish as it has perished. (Bravos.)

The Republic will make the laws respected, holy laws, before which all power must bend its head, laws, the safeguard of order and of public happiness.

The Republic will make *justice* respected, the image of

God upon the earth, without which nothing here below is durable.

The Republic will make *rights legitimately acquired* respected, for it would be odious to take away the fruits of their labor from those who have spent their lives in the service of the country.

The Republic will make *property* respected, for it is the recompense of labor, of the trials of a lifetime, and nothing would be more iniquitous, more cruel, than to wrest from those who have amassed it, the price of their sweat.

The Republic will make *religious faith* respected, for nothing is more sacred than conscience, and none have the right to violate the sanctuary. (Prolonged bravos.)

The Republic will grant *liberty of instruction*; for what it gives to one, it cannot, without injustice, refuse to another.

The Republic will grant *liberty of the press*; for the press, like the lance of Achilles, cures the wounds that it makes.

The Republic will grant *liberty of association*; for this liberty leads to legitimate progress in enlightening the people on their interests and their rights.

Such are the benefits that the Republic will shower upon her children.

With it should disappear all social sores engendered by vice, ignorance, and selfishness; with it should be born every prosperity which springs from their opposing virtues.

But do not believe because of this, you are to be exempt from all toil, from all labor, from all duty. This happiness must be purchased; you must redouble your efforts; you must bring your stone to the indestructable monument of liberty; you must pay your tribute, not only as citizens, in sharing the labor of the whole, but as physicians, in redoubling your assiduity and zeal in study.

Remember, gentlemen, that if, in the past, you thought to have only men to treat, you know to-day that these men are your brothers. You cannot acquire then too much knowledge, too much ability to fulfil your noble mission. The



Republic has the right of demanding from you all the talent that you are capable of acquiring.

And now, gentlemen, we all owe absolute obedience to the Republic; we must all lend to it our efforts to forward, sustain, and perpetuate it.

Upon its stability depends the glory, the splendor of our country. No sacrifice should be deemed too costly if made for her. We all owe her all that we hold most dear, even to the giving up of our lives, if her interests demand it.

*Salus populi, suprema lex.*

When the eloquent speaker sat down, the applause was long continued.

*Fissure of the Anus; Subcutaneous Tenotomy.*—We are aware of few local affections in which a longer catalogue of remedies has been proposed, than the one which forms the caption of this article. The very often intolerable pain which attends it, accompanied not unfrequently by spasm of the anus, demands active means to soothe the one and overcome the other. The employment of the bistoury is not rarely required, though there are many cases for the relief of which all that is necessary, is the application of emollient and anodyne fomentations, or at most, cauterization with the nitrate of silver.

Dupuytren, it is reported, employed with considerable success a mixture of the following ingredients:

Extract of belladonna, ℥ij.

Honey water, ℥ij.

Adipis, ℥ij.

carried into the anus by means of a wick or tent. By gradually augmenting the volume of the tent, the resistance of the sphincter is overcome. It appears desirable to make the tent as large as possible, for, although it causes very considerable pain at first, this soon ceases.

Cold water applied to the part, and decoctions of various substances have been much vaunted, but the three remedies which have been most insisted on within late years, are cau-

terization with *lapis-infernalis* and nitrate of silver, dilatation, and section of the sphincter.

Boyer, the first to propose incision of the sphincter, regarded this operation as invariably successful, though Roux, Bécлар, and Richerand have all cited cases in which it has failed in their hands.

Dilatation has also had, and has still, its advocates, among others Dubois, who declares that it *constantly* succeeds, and Bécлар, Marjolin, Copeland, &c.

Without consuming further time in this way, I will say that the subcutaneous section of the muscle, as proposed by M. Blandin, appears to me to possess incontestable advantages over all other methods that I have ever seen used, and I have seen almost all used that the art possesses.

M. Blandin divides the operation into four stages:

- 1st. Puncture of the skin.
- 2d. Introduction of the finger into the rectum, and tension of the skin on both sides of the anus.
- 3d. Pushing the tenotome between the mucous membrane and the muscle.
- 4th. Division of the muscle.

The puncture of the skin is so simple that it is unnecessary to speak of it, save in relation to its seat, which is a matter of some importance. Practiced too near the anus, it renders the section of all the muscular fibres somewhat difficult, and exposes, while dividing them, to enlargement of the cutaneous opening; then, if the patient is obliged to go to stool before the cicatrization is perfect, the contact of the fecal matter with the wound will irritate it and determine an inflammatory action, which may even pass, in some circumstances, rare it is true, to the phlegmonous state.

If the puncture is practiced at too great a distance from the anus, some difficulty will be experienced in cutting the most internal fibres of the sphincter, which, I need not remark, it is always essential to divide completely. The proper distance at which to make the puncture of the skin is from five to seven lines from the anal opening.

If it be complained that I have given too much space to this portion of the subject, my reply is, that in subcutaneous sections of muscles the persistence of the integrity of a few very fine fibres may almost completely mar the results of the operation. Some years ago, when strabotomy was, if we may use the expression, the fashionable operation, it often happened that the complete section of the muscle, with the exception of one or two fleshy fibrils, produced no change in the direction of the ocular globe, and it became necessary, by aid of a blunt crotchet to find those fibres which had escaped, in order to effect a cure.

That which obtained in the muscular fibres of the eye occurs equally in the section of the sphincter of the anus. It has happened to Blandin himself, and notwithstanding the care that this able operator invariably takes, he has been more than once obliged to resort to a second section, in order to relieve a contraction which a first attempt had failed to overcome.

In connexion with this subject, the following case which occurred in Blandin's wards may prove interesting:

A young girl entered the service of M. Blandin a short time since, having an anal fissure accompanied by all the characteristic phenomena, spasmodic constriction, lively pain, etc. The operation was performed by the subcutaneous method; the recovery was rapid, equally as regards the fissure and the muscular constriction. Notwithstanding there still remained something—a little pain, a little constriction. The finger introduced into the anus passed, however, with sufficient facility, and M. Blandin thought that with time and the aid of opiates the girl would be cured. But, convinced that some of the fibres of the sphincter had escaped, he determined to perform the operation anew, as being a more simple and rapid means, and more certain of effecting a complete and definite cure.

What remains to be said of the operation is but brief.

The introduction of the finger into the rectum is of real importance, since its internal face serves as a guide to the

instrument inserted beneath the mucous membrane. This introduction may sometimes prevent the destruction of the mucous membrane, which would certainly be far more easy without this introduction. The remaining steps of the operation do not differ from those of ordinary tenotomy. At the moment when the instrument divides the muscle the well known *bruit de craquement*, characteristic of the section of a tense muscle, is heard. When the operation is terminated, by the muscular section being complete, contraction ceases, and the finger introduced into the rectum manifestly feels a depression, if it may be so expressed, of greater or less length and extent, formed by the interval which separates the two extremities of the divided sphincter. The dressing consists simply in the application of compresses, wrung out of cold water, to the little wound, which cicatrizes in forty-eight or seventy-two hours. Five or six days suffice to reunite the two extremities of the muscle.

I close my long miscellaneous communication with a short article on *Gun-Shot Wounds*.

The chief surgeon of Val de Grace, M. Baudens, during a short series of lectures which he delivered just after the Revolution of February, on gun-shot wounds, gave in a very few words the basis of his treatment of these accidents, which, from all accounts, was eminently successful in Algeria.

It is embodied in six precepts, which run thus:

1st. Of a compound wound make on the spot a simple one, by extracting the fragments of bone.

2d. Combat by cold water, and if need be by ice, the excess of the local traumatic reaction.

3d. Keep the inflammation local, and thus prevent it from gaining the important viscera.

4th. If the thoracic member has a comminuted fracture, extract the fragments, make suitable resections, and reserve amputation as a last resource.

5th. If the femur is fractured with fragments, amputate immediately; if the tibia or the fibula alone is fractured, en-

deavor to preserve the extremity, after having removed the fragments, and reserve amputation; if the fracture involve both bones, as a general rule, amputate immediately.

6th. Isolate, at whatever cost, the patients whose wounds suppurate, in order to prevent the much to be dreaded miasmatic infection. In the absence of chambers, put the wounded under tents; in the absence of tents, place them in the open air, under hastily-erected sheds.

Paris, April, 1848.

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ART. I.—*Notes on Medical Matters and Medical Men in Paris.*—

By DAVID W. YANDELL, M.D., of Louisville, Ky.

The following case which occurred in the wards of M. Grisolle, at La Charité, appearing to me of considerable interest, I have copied my notes of it with the view of offering them to the readers of your Journal, at the same time that I have to ask them if they have met in practice or books with any analogous example. So far as my own knowledge extends, it is unique in the annals of medicine:

A woman, aged 49 years, of good constitution, and in the constant enjoyment of health until about four years ago, since which time she has suffered continually from sensations of suffocation, unaccompanied by palpitations, from frequent vomitings, and on several occasions from slight hemoptysis, entered the hospital a fortnight since. Before going further,



I may remark that, the account given by the patient of herself is in every respect deficient and unsatisfactory.

Two weeks previous to her admission into the hospital all the phenomena of which I have made mention were augmented; there was a violet hue and tumefaction of the face and right arm; œdema, commencing at the shoulder and neck, occupying the left arm, though to a less extent than the right, and extending to the anterior portion of the trunk, being particularly well marked in the mammæ. For these symptoms she was ordered to be bled, purged, and leeches.

The patient entered the hospital in a state of extreme anxiety, her face swollen and violet colored. She was immediately bled, and at the morning visit M. Grisolle detected the following:

œdematous tumefaction of the face and arms, especially of the right arm; of the subcutaneous cellular tissue of the breast in front, less posteriorly. Further, there is extreme development of the subcutaneous capillary net-work, especially on the right side; and the veins are prominent. The conformation of the chest, so far as the œdema admits of its being judged, is normal. Thoracic resonance good in front on the left side; on the right side, obscurity of sound, especially in the submammary region, and also in the *superior half of the sternum*, where the respiratory murmur is very feeble and remote. There is nothing notable in the circulatory system; the pulse is equal on both sides, firm, beating eighty times per minute; the beats of the heart are of moderate force, the sounds are heard under both clavicles; digestive functions good; intelligence clear. Nothing on the part of the brain.

M. Grisolle went at some length into the differential diagnosis of those affections to which this might be deemed analogous, and his remarks being more than usually interesting, I trust that a brief reproduction of them will be acceptable.

He barely made mention of Bright's disease, and examined the urine, he said, only for form's sake. In the majority

of cases in which it is observed, dropsy, which is always the symptom of an organic alteration, recognises as its cause an obstruction of the circulation. But where is this obstacle situated? The idea of an affection of the heart cannot be admitted in the present instance. The œdema symptomatic of a cardiac affection almost always commences in the inferior extremities, and progresses from below upwards. In the case in hand it interests only the superior part of the trunk.

Since, then, it is not in the heart, we must seek the cause in the venous system. The œdema symptomatic of an obstacle in the venous circulation, which it has been pretended, we know not on what grounds, is a recent discovery, will be found a point insisted on at some length in the works of Boerhave, Van Swieten, Morgagni, and Cullen. The veins are very active agents of absorption. When circulation in them is obstructed, absorption no longer goes on; the cellular tissue becomes engorged with serum, and thus we easily comprehend the mechanism of the production of dropsy. By a wholesome provision of nature the collateral circulation is not unfrequently augmented, and in some rare instances this development of the auxiliary veins may amount to an absolute relief of the disease. There are cases, exceedingly rare, it is true, where the inferior vena cava has been completely obliterated without there resulting any œdema. M. Grisolle himself observed an example at Beaujon hospital in which the collateral circulation was developed to the point of completely supplying the loss of the diseased vein.

In the case before him, said M. Grisolle, from the fact of the œdema being confined to the superior part of the body, and the exaggeration of the supplementary circulation, the obstacle cannot be elsewhere than in the superior vena cava.

Another question is, what is the nature of the obstacle? Is it internal or external to the vessel? If on its interior, it may arise from polypiform concretions. But these are lesions as rare as they are spontaneous. They cannot, in this

case, be the consequence of a phlebitis, for a spontaneous phlebitis is of too rare occurrence. Is there, in fact, a single well authenticated case of primitive inflammation of the venæ cavæ? Moreover, there would have been a development of acute symptoms, and the patient would have inevitably perished. In its antecedents there is nothing which indicates an acute disease.

Can this, then, be an external compression? In nine instances out of ten this is the case. Sometimes it is a goitre which is developed on the anterior part of the neck, and sends prolongations into the chest. In children, it is tuberculous ganglia which exercise the compression; in other instances, a pleuritic effusion may compress the vena cava, at least we are justified in supposing so, although there are no well established examples of this kind on record. An induration of the superior lobe of the lung, an intra-thoracic tumor, a lesion of which M. Gintrac has reported some examples, may produce this accident. Finally, and this is the most common lesion, an aortic aneurism may produce this compression. It is certain that in the present case there is neither pleuritic effusion nor goitre. Nor is there anything to lead us to suppose that there are tuberculous ganglia. If the subject were a child, we would be almost forced to attribute it to this cause; but in the adult, although Marchal (de Calvi) has demonstrated the possibility of its occurrence, still it is so rare a lesion, and the evidences so entirely opposed to its existence in the present instance, that we dismiss it, confident that it does not obtain here. Pulmonary induration, consequent upon pneumonia, is not less rare; and moreover, it always produces grave constitutional symptoms, which have been entirely wanting in our patient. Relative to cancerous tumors of the mediastinum, they are invariably connected with a general diathesis, and affect the system in a way of which we have no traces here. The hemoptysis of which the patient spoke, may very well depend upon some disease of the arteries,

There remains as a last supposition aneurism of the aorta; which is, in fact, in at least three cases out of four, the cause of venous compressions. But here there is complete absence of all the signs which indicate it. There is neither *bruit de souffle* nor *de râpe*, nor arching of the chest, at least so far as the œdema will admit of our judging. On the other hand, there are strong grounds to believe rationally in the existence of an aneurism of the aorta, in view of its frequency, and of the oppression, which is of four years' standing, and finally, in view of the absence of all other possible disease.

The variability of the results of the compression can only be explained by aneurism of the aorta, an affection in which the very intense phenomena may diminish and almost disappear from one day to another, according as the tumor, under the influence of various causes, is diminished or augmented. The considerable volume of the tumor explains sufficiently well the absence of the *souffle* and of a strong impulsion.

Relative to the prognosis, M. Grisolle predicted an early death, because of the gravity of the symptoms. How is the circulation of the patient performed? Probably, remarked the professor, the vein is still in part permeable; the only indication to fulfil is, to diminish the mass of the blood; and with this view two bleedings were made. There is here danger at any moment: there may be compression of the brain in consequence of rupture of a vein; rupture of the aneurismal tumor, if there exists one, which however is not demonstrated. But under any hypothesis whatever the case is beyond the resources of art.

Four days after this meeting the patient died. The following, which in some respect supports and in others is opposed to the opinion of M. Grisolle, was found at the autopsy.

Half a glassful of serum was found in the cranium; the cerebral pulp slightly injected, which, however, may be remarked in passing, does not satisfactorily account for the cerebral phenomena which preceded death.

On opening the chest, a tumor, composed of a fatty substance, was found behind the sternum, of an inch and a half in extent vertically and an inch in width, which explains both the dulness and the absence of the respiratory murmur. The tumor extended from the *manubrium sterni* to the base of the heart. This much was in support of the diagnosis of Grisolle.

The superior vena cava was swollen and distended by coagula; but, at a distance of three-fourths of an inch from the heart it contracted almost abruptly, and was transformed into a full, solid, fibrinous cord; there was complete obliteration of the vessel. M. Grisolle had believed that there was only obstruction, but there was more; the vein no longer existed. Farther, there was no aneurism of the aorta. The superior vena cava rested upon a patch of induration which encircled the main bronchia of the superior lobe of the right lung, which explains the sibilant rales heard upon auscultation. The superior lobe had the aspect that the lungs present when compressed for a long time by an effusion.

What was the cause of this alteration? By what mechanism was it effected? Probably, certainly even, there had been phlebitis, and, more certainly still, primitive phlebitis, if one considers the rarity of the propagation of inflammation of the cellular tissue to the veins, and the frequency of this propagation from the veins to the cellular tissue.

Grisolle is the more excusable for having made this error in diagnosis, from the fact that this is the only example on record, in our knowledge, at least, of obliteration of the superior vena cava by spontaneous phlebitis. Hodgson, in his work on the diseases of the arteries and veins, has the following sentence: "*I am not aware that the superior vena cava has ever been found completely obliterated.*" In the translation of this most admirable of books into French, by Breschet, the following note occurs, though it will be remarked that the analogy between the case which he cites and the present is not perfect, since in the former, the obliteration



of the cavity of the vein came from within, and depended upon polypiform concretions, whilst in the latter, the vessel was completely transformed, being a perfect fibrous cord: "In the museum of the Faculty of Paris, there is a piece modelled in wax by Pinson, under the direction of Dupuytren, which represents a polypiform concretion formed in the superior vena cava, and is prolonged into the subclavian and the jugulars, obliterating the canal of these vessels, to the walls of which it adheres; this concretion is white, which leads us to believe that it was formed of fibrine."

*A few Considerations on Osteitis and some of its forms.*—It is only within the last fifteen years that osteitis has been at all understood, the reason being that, before this time, the intimate structure of bone was not even suspected, notwithstanding it had been made the object of repeated and well conducted research.

Although as far back as the seventeenth century Leuwenhoeck expressed opinions concerning the nature and structure of the compact tissue, not far different from those entertained at the present day, they were abandoned and almost totally forgotten, when Deutsch verified anew their exactitude, in 1834. M. Gerdy arrived at the same results at almost the same time, and Miescher confirmed the investigations both of Gerdy and Deutsch the year following. A correct and intimate acquaintance with the structure of the bones conducted to that of their diseases. The proof of this fact is found in the publication of M. Gerdy, upon the material state of diseased bones (1836), which followed the year after the appearance of the first work.

In the possession of M. Demarquay, prosector of the Faculty, there are two exceedingly curious pieces of pathological anatomy, of which I shall endeavor to give an idea, at the same time that it affords me an opportunity of alluding more at length to the works above cited.

The first piece is the left femur of a woman who presented a number of fistulous abscesses in the thigh, but concern-

ing whose history nothing could be learned. An attentive examination reveals the following: The periosteum is inflamed and thickened throughout almost the whole length of the bone; raising it up a layer of calcareous substance, from one to two millimetres in thickness, an osseous tissue of new formation, reddish and still spongy, is perceived occupying nearly half the surface of the bone. This layer constitutes what has been designated under the name of osseous stalactites, that are found deposited in certain forms of osteitis by the periosteum, whose mode of action and vitality has been modified. In the half of the bone which at its surface is not the seat of these deposits, great vascularity is perceived, vascularity analogous to that observed in a muscle or in skin.

The bone being divided longitudinally by means of a saw, presented the following: In certain points the medullary canal is enormously dilated; abscesses, many of which have opened externally, are found in the osseous tissue itself; three perforations of the bone by which the pus was evacuated are observed. These osseous abscesses are situated at the union of the inferior third with the superior two-thirds. The whole of the middle third of the bone presents a lesion diametrically the opposite of this. The medullary canal has completely disappeared, obliterated by the deposit of a compact substance, continuous, without any interruption, with the normal compact tissue of the bone; thus, whilst the superior and inferior third of the bone are the seat of *rarifying* osteitis, the middle third offers a manifest example of *condensing* osteitis. In the whole of the superior part of the osseous canal, the medullary membrane is red, injected, vascular; in the inferior part, on the contrary, the vascularity is partial, and pseudo-membrane and purulent deposits are found; these deposits being prolonged to the articular cartilage, which is very thin, scarcely indeed existing at all. The compact portion of the condyles is so vascularised and thinned that it may be said hardly any longer to exist, while it yields readily under the pressure of the finger.

Gerdy, in his researches on the normal structure of the bones, says they are formed of 1st, A compact tissue, an assemblage of osseous tubes developed around vessels, as the body of the long bones is primitively but an osseous canal developed around the medullary artery, of a minuteness which renders them inappreciable to the microscope, they acquire in osteitis, a dilatation which reveals both their existence and arrangement.

2d. Of a *canalicular* tissue, an agglomeration of little canals, with walls pierced by holes, nearly parallel, and most abundant towards the extremity of the bone; this is the spongy tissue.

3d. The *cellular* or *areolar* tissue, the description of which would be very difficult in this place, and which is found in the epiphyses, the flat and the short bones.

4th. The *reticular* tissue, solid osseous fillets, which occupy the medullary cavity of the long bones, and that of the short bones provided with a medullary cavity.

The vessels of the bones extend into the canaliculae, and there anastomose through the medium of the holes in the walls of these hollow tubes in the centre of the medulla, which is essentially the same in the canaliculae as in the canals properly so called.

Our limits do not allow us to continue these extracts, but we would refer the reader to the Memoir of M. Gerdy, inserted in the *Bulletin Clinique*, of which we have made mention. Let us now trace the parallelism of the case in hand with the pathological description of M. Gerdy.

Osteitis, says he, is rarely simple, or at least is so for only a short time. Traces of inflammation of the periosteum and of the medulla are almost constantly found in inflamed bones, and often an inflammation of the cellular tissue which unites the cartilages with the articular extremities of the bones. Osteitis shows itself in the four tissues of the bones, either primitively or consecutively; that is to say, observation proves that a bone becoming inflamed in any point of its different tissues, the inflammation extends to the other tissues

of the bone. Osteitis assumes three different forms, which may exist at the same time in the same bone, and of which we find examples in the piece that we have described.

1st. *Rarifying* osteitis, which consists in such a dilatation of the furrows, the canalicular, and the vascular openings, that they allow the introduction of a large sized pin, and even in some cases a pigeon's quill.

The absorption of the osseous substance is such that when a bone is generally inflamed its principal canal of nutrition is sometimes increased to double the normal size. The medullary canal becomes dilated and approaches both the surface and the extremities of the bones. The canalicular or spongy, and the areolar tissue do not offer less profound and marked alterations.

2d. *Condensing* osteitis, in which the compact tissue is thickened and rendered more dense; the canalicular and reticular tissue are also occasionally altered in the same manner. The bone on being cut presents the aspect of sawed stone. It also often happens that the alteration of these tissues completely obliterates the medullary canal of the long bones, as is the case in the present instance.

The vascular rarification of the bones is evidently produced by the resorption that the vessels exercise at the circumference. This cannot be doubted, for there is no trace of any osseous detritus around the vessels, as would occur if the dilatations were owing to mechanical wear; on the contrary. the compactness of condensing osteitis is a product of interior secretion.

3d. *Ulcerating* osteitis, which consists in an ulceration which is always accompanied by more or less abundant supuration.

Where osteitis becomes complicated with periosteitis, the periosteum is thickened, adherent to the bone, injected, etc. But what is more curious, are the deposits of osseous matter under the periosteum on the surface of the bone itself, in the form of distinct but very small drops, mamillated eminences,

or laminae of greater or less size—as is seen in the femur of which we are speaking. This, now, is a proof, furnished by pathology, of the physiological law of the formation of bone by the periosteum. The inflammatory action augments the normal osseous secretion. In cases where ostitis is complicated with inflammation of the medullary tissue, the medulla is more or less red and inflamed. If there is *sub-diarrthritis*, the cartilages seem to become thin, yield under the finger, and sometimes disappear entirely.

We have endeavored in making these translations only to go so far as to exhibit the correctness of the descriptions, and the possibility of the simultaneous existence in the same bone of these different forms of inflammation.

I hasten on, for fear of wearying your readers, to a very brief description of the second specimen of which I spoke, which, in my eyes, is not less interesting than the first, to which it has many points of resemblance. This is an ankylosis of all the bones of the carpus, with those of the forearm on the one hand, and with those of the metacarpus on the other. The inferior extremity of the radius is continuous with all the bones of the carpus and metacarpus without the least interruption, without its being possible in any way to determine the point where one begins and the other ends. The only two bones which are untouched by the ankylosis, are those in which the synovial capsule is independent, the metacarpal of the thumb and the pisiform. The articulation of the cubitus is equally independent. We find here a demonstration of the fact advanced by M. Gerdy, of the absorption of cartilages under the influence of osteitis; these cartilages once absorbed, the osseous surfaces are in contact, and osteitis, assuming the condensing form, determines the soldering of the bones.

These two specimens complete one another. In the first, we see the beginning of the work of condensation. In the second this labor is finished, and we find but its result.



*Encephaloid Cancer of the Testicle. — Castration. — New Method. — Recovery.* For sometime past I have intended to speak of a new method of castration proposed by Jobert, of St. Louis hospital, but have unavoidably deferred it till now.

Although ablation of the testicle is in itself not an excessively grave operation, it nevertheless demands such precautions that modern surgeons are still divided concerning the best method of operation, and this difference of opinion obtains in each of the two steps of the operation. Thus, in the first, one party, and by far the larger, practice one or two semi-elliptical incisions upon the anterior part of the tumor which they afterwards dissect in its entire circumference; the other, adopting the method of M. Aumont, leave intact the anterior part of the tumor, while they attack it by an incision made upon its posterior part. This last method, according to its supporters and M. Aumont himself, is more prompt and consequently less painful, and by the very position of the wound, allows the pus to escape with much more facility; whilst after the ablation of the testicle by the first method, which is the ordinary one, there remains a quantity of skin sufficient to form a species of pocket or pouch where the pus stagnates and prevents prompt cicatrization.

M. Roux thinks the advantages claimed by Aumont are more apparent than real. After having frequently performed the operation according to this method, he declares that he has seen it followed by inflammatory accidents, such as have induced him to abandon it altogether. This does not appear astonishing, if it is remembered that the wound thus placed at the posterior part can be dressed only by lifting up the scrotum, which always produces pain, and even suffices, in some cases, to produce the inflammatory accidents observed by M. Roux.

Furthermore, in the method of Aumont as well as in the ordinary one, there is the disadvantage of having too much skin, which prevents the union by first intention, so import-

ant when it is wished to obtain a prompt cure. It is with the view of obviating all these inconveniences that Jobert has proposed the method that we will presently describe, and which, as will be seen, perfectly fulfils all the indications.

Surgeons are not more harmonious concerning the second step of the operation. Here the question is to know if the ligation of the cord should be practiced *en masse*, or if it is not preferable to tie each artery separately.

The partisans of the first method urge in favor of their opinion the difficulty that would be experienced in seizing each artery after the section of the cord, which, owing to its retraction, has to be held by an assistant. Such is the opinion of Roux and Malgaigne.

Without denying the fact, it may be simply remarked that Jobert has already performed the operation quite a number of times, and in no instance has the retraction spoken of been observed; and further, the cord, when divided almost on a level with the internal orifice of the inguinal canal, remained prominent in the bottom of the wound, and nothing was easier than to sieze hold of each artery, and throw a ligature around it. Moreover, admitting even the possibility of the retreat of the cord, there is a very simple way of avoiding the inconveniences which would ensue, and this without throwing the ligature around the cord *en masse*. This consists in tying each artery as it is exposed by the bistoury—a measure proposed by M. Bichat, and always practiced by Jobert.

In this way the ligation of all the arteries which enter into the composition of the cord is performed before the section of the deferential canal; so that after the division of the latter, the cord may retract without creating any fear of hemorrhage. It is true that this procedure is longer than that which consists in ligating the cord *en masse*, and this is an important consideration, since in one instance Begin, after having tied the cord, saw the patient die of tetanus, which he attributed with reason to the sufferings experienced by the

patient during the operation. Another not less important consideration is drawn from the time at which the ligatures come away. In Jobert's operation the ligatures commence dropping off from the eighth day, and thus there is nothing to retard the cicatrization of the wound, whilst in the other methods the ligature is not cleared till at a much later period. Jobert has seen it remain for sixty days, and there can be no doubt that it served by its presence to prevent the cicatrization of the wound; and in some cases acting as a foreign body, it determines much suffering and even very grave inflammatory accidents.

Without adding anything more, without speaking of the method of certain other surgeons, (Pouteau among the number) who have proposed to tie the cord previous even to attacking the tumor, which in some cases has become gangrenous and escaped by an opening in the scrotum the result of sloughing, we will conclude by reporting a case which occurred in Jobert's wards during last winter:

M. Moret, aged 39 years, a worker in copper, entered the hospital on the 10th of January, 1848. Of a good constitution, the patient has always enjoyed good health. He says that he has never had any syphilitic disease, nor any injury of the scrotum.

Fifteen days before the appearance of the disease for which he was received into the hospital, he remarked the development of two small tumors in the right pectoral region; these, however, he rid himself of by the application of a pomade, with the composition of which he was unacquainted. About a fortnight after their disappearance he perceived that the right testicle was more voluminous than that of the left side, though it gave him not the slightest inconvenience and did not interrupt his work. The testicle continued increasing in size, so rapidly indeed that at the end of five months the patient, without having ever experienced any pain, determined to enter the hospital, at which time his condition was as follows:

His general condition is satisfactory, and he presents no symptoms of diathesis. The right testicle is the seat of a tumor about the size of the closed hand; it is regular, not transparent, and offers neither fluctuation nor resistance. But little sensible to pressure, the skin which covers it is mobile and traversed by dilated veins. After having interrogated the patient and carefully examined the tumor, M. Jobert diagnosed an encephaloid tumor of the testicle. With a view, however, of being more sure, he made an exploring puncture, which only confirmed him in his opinion. The canal of the trochar gave issue to only a few drops of blood, which continued to flow from the puncture after the instrument had been withdrawn. And this, let me remark, is considered by Jobert as a characteristic sign of encephaloid cancer. He no longer hesitated to propose the removal of the tumor, which being agreed to by the patient, was performed on the 18th of January, in the following manner:

An assistant kept the testicle of the opposite side well drawn back; Jobert now placed himself on the right side of the patient, and made upon the right side of the tumor an incision which, after arriving at the most dependent portion was continued upon the left side, though not so high up as that on the right side, in order to avoid injuring the left vaginal tunic. This incision, which has the very form of the tumor, divides all the scrotal tunics down to the testicle; so that two flaps result, one of which is applied upon the anterior face of the tumor, whilst the other covers the posterior.

The second step of the operation consisted in raising each of the flaps, by destroying the cellular attachments which connected them with the tumor. This step of the operation, as will be readily understood, is exceedingly short, and we arrive almost immediately upon the pedicle of the tumor. that is to say, upon the spermatic cord. Instead of cutting this by a single stroke, we have said above, that Jobert, by means of gentle touches of the bistoury, divided the arteries



one by one, and immediately tied them. When he reached the deferential canal he divided it with a single cut of the bistoury, without any trace of blood issuing from the cord, which projected in the middle of the wound.

The two flaps were then cleansed, and a few small arteries which poured out blood upon their surface were ligatured; finally, the two flaps were applied one upon the other, like the two valves of an oyster shell, and were very easily maintained in contact by means of a number of twisted sutures. Simple dressing was made, and the patient, who had been chloroformed, was taken to his bed unconscious of having submitted to the operation.

The dissection of the tumor entirely confirmed the diagnosis. It was obvious that it was composed of encephaloid matter in different stages of softening. In its middle thick walled cysts, resembling cartilage, were observed the origin of which Jobert attributed to an abnormal dilatation of the seminal canals.

Save a slight œdema which appeared in the first twenty-four hours after the operation, and as soon disappeared, nothing occurred calculated to retard the recovery of the patient, who, at the end of twelve days, was reported cured.

The method of castration as proposed by Jobert seems to fulfil all the desired indications more completely than any of the others.

In the first place, the dissection of the tumor is as simple, as prompt, and executed with as much facility as in Aumont's method.

2dly. The wound is more easily dressed, and the cicatrix, though placed on the sides of the scrotum, is not more visible than in Aumont's method.

3dly. The posterior flap forms an inclined plane upon which the pus glides with facility, whilst the wound, by its dependent position, affords it easy escape.

4thly. The flaps are brought together and united by first intention with great facility.

Finally. The ligation of the arteries, as practiced by Jo-



bert, while it offers the advantage of preventing all hemorrhage, saves the patient the cruel suffering which results from tying the cord *en masse*.

*Dry Gangrene of the Extremities produced by a Septic Cause.* The causes of dry gangrene of the extremities are extremely obscure. Jobert has recently called the attention of the profession to one—puncture of the skin by an instrument charged with septic matter—which hitherto appears not to have been sufficiently insisted upon, and the variety of gangrene which it produces not at all, or at least not satisfactorily described, by authors. During the past winter Jobert has, on several occasions, pointed out to me examples of this variety, and it is with the view of presenting an outline of them, with the treatment which he adopted, that I have introduced the subject.

A female sick-nurse, 50 years of age, entered the hospital in November, 1847, laboring under dry gangrene of the thumb of the right hand. Before her admission into the hospital she had been waiting on a lady who had, a short time previous, submitted to the removal of a breast; when one day while sewing the linen together which had been used in dressing the wound, and which was impregnated with pus and septic matter, she pricked the pulp of the right thumb with her needle. At first she paid but little attention to it; but the same evening her fingers and hand became swollen; nevertheless she continued her work without any inconvenience resulting till two days after, when in the night she was seized with a violent chill, accompanied by cephalalgia, vomiting, and diarrhea. Forty-eight hours afterwards she entered the hospital, at which time the thumb was black, dry, and horny.

During the first eight days the general symptoms persisted, though somewhat less intense. At the end of this time her appetite returned, the gangrene became limited, and Jobert disarticulated the member at the first phalanx, soon after which the patient quit the hospital cured.

Two analogous cases, which were treated with the same success, were admitted into the hospital, the one in October last, and the other in February.

We have had here, said Jobert, gangrene presenting the characters of senile gangrene, but of a peculiar nature, and of which we are obliged to regard septicity as the exciting cause. There was true impoisonment of the punctured part, produced by the inoculation of a virus which acts in the same manner as that which produces malignant pustule.

It is nevertheless necessary that we establish between the virus of malignant pustule and the virus which has caused this, an important distinction. The action of the virus of malignant pustule is in some degree indefinite. That of which we speak seems to be less energetic and intense. The gangrene that it determines always becomes limited after a certain time; the force of the virus growing gradually more feeble. It may happen that the virus after having exhausted its disorganizing force still preserves sufficient energy to produce a diffuse phlegmonous inflammation.

According to Jobert, the accidents which succeed the prick of a lancet or scalpel, or which appear to be developed spontaneously, are the result of one and the same cause, the mode of action of which is the same, the only difference that it presents being in its intensity. It produces a local gangrene which soon becomes limited for want of virulent matter, or only a diffuse phlegmonous inflammation; or it may continue progressing and destroy indiscriminately all the tissues, presenting the greatest analogy with malignant pustule.

The treatment of this new variety of gangrene, or to speak more correctly, of this not before described variety of gangrene, is general or local. The first, which is but secondary and accessory, consists in emollients, derivatives to the digestive tube, and even, if they are indicated, opiates internally. However grave the general symptoms may be, sanguine emissions are not admissible, for they would but facilitate the absorption of the virus and give rise to still more grave accidents. The surgeon should make every effort to

localize the action of the septic matter and, as far as possible, destroy it.

This latter result is only obtained by means of local treatment similar to that adopted in malignant pustule, namely, cauterization with the red iron. Jobert thinks that no other caustic agent compasses the desired end so entirely as this; for a profound, and, in some measure, instantaneous action which attacks and immediately destroys all the remaining virus, is what is required. If the virus has already produced gangrene of a certain amount of tissue, if the gangrene is of small extent, you must not hesitate to cauterize.

Finally, if the gangrene has invaded an entire organ, a finger or a phalanx, for example, amputation is indispensable. But in such an extremity, bear in mind that the smallest portion of the fingers or hand may be of the greatest service, which should induce you to respect the portion of the organ which is not the seat of the gangrene however small it may be.

*A new method of removing Lipoma.*—Instead of circumscribing the tumor by two semi-elliptical incisions, and proceeding from without inwards, which always necessitates long and painful dissection, Jobert grasps the tumor firmly in one hand, squeezes it in order to diminish as much as possible its transversal diameter, then, with a long and narrow bistoury he transfixes the tumor transversely on a level with the skin, in such a way that it is divided throughout its entire extent. This incision is hardly accomplished before the two borders of the wound separate spontaneously, when the two halves of the lipoma may be seized with great facility and rapidly enucleated. Union is to be affected by suture.

*Acetate of Lead in Diarrhea.*—A patient in the wards of M. Béhier labored, for three months, under an abundant diarrhea which it was impossible to refer to any appreciable lesion. He presented no sign of pulmonary phthisis, nor of chronic disease of other viscera. Béhier ordered a blister

to be applied to the ileo-cæcal region, and though the effects of it were by no means remarkable, a very curious phenomenon supervened in connexion with it. The patient after he had dressed the blister, having carried his hands to his lips and eyes, herpes labialis and ophthalmia resulted, during the entire existence of which the general condition was greatly ameliorated; the diarrhea disappeared almost completely, but it returned as soon as the two concomitant affections were cured. For some days M. Béhier prescribed the liquid subacetate of lead in injections, instead of the extract of bark and laudanum that he had previously employed. Béhier thinks this mode of administration of the salts of lead exposes less to saturnine accidents than any other.

This application of the subacetate of lead is not new—concerning it M. Barbier says: “In the majority of cases rebellious diarrhea is produced by an irritation confined to certain points of the internal surface of the intestines, at which spot the sensibility is exalted, and there is increase of heat, tumefaction, and redness; often even, the evacuations are caused by minute superficial ulcerations along the course of the alimentary tube. In this diarrhea we have obtained very great success by the internal use of the acetate of lead. It seems to act upon the mucous membrane of the intestines, as it acts on the skin, by diminishing the irritation, the pain, and the heat in those places which are slightly ulcerated, by determining the cicatrization of these local lesions.”—*Dict. des Sc. Médicales*, v. xiii., p. 569.

Gardner, in an English Journal of 1830, regards this action of the salts of lead internally in serous and mucous fluxes as better established than any other that is attributed to this substance. And never, or at least exceedingly rarely, has he seen it produce saturnine colic in cases of this kind.

*The value of Tears in the Prognosis of the Diseases of Children.*—Trousseau affirms that, when a child cries its disease is not grave; that when it does not cry, its disease is very grave. This he thinks may be regarded as an aphorism. If



the child cries, it will recover; if it does not cry it is very seriously ill. Although there are exceptions to this rule, still they are so rare that the physician should hold it in very sacred esteem.

If you are called to a child who, up to that time had cried, and who does not cry when you vex it, if its eyes become suddenly dry and sunken in the orbits, look out for a very grave disease of some kind; you will rarely be deceived unless, as sometimes happens, the child never cries naturally, and there are those of this kind. On the other hand, when you have detected souffle and dulness in a chest, when you have discovered hypertrophy of the liver or spleen, tympanitis; if you see the child shed a few tears, let your prognosis be favorable, it is the sign of early convalescence in almost every instance.

This sign is of value until the seventh year, when it ceases to be important. In the two first years, and especially in the first, it is almost invariably true. After the first year it is less to be relied on and gradually diminishes in worth every year till the seventh when, as I have said, it becomes valueless.

In serious operations on children, not for external diseases, but for affections, which although local, give rise to very grave symptoms, as croup, for instance, I have never seen a child cry under the bistoury. The little beings suffer but without weeping; and when some days after I see them shedding tears, I rejoice; and when they do not weep, I predict an unfortunate termination, which is nearly always realized.

*Comparison between the Surgical and Medical Treatment of Cancer of the Breast.*—There are certain cases, remarked M. Velpeau, in one of his late clinical lectures, when you may ask yourself if you should attack the disease by medical means, others where the indications lead you to resort to surgical therapeutics.



Certain practitioners employ in cancers of the breast, topics, resolutives, sanguine emissions, baths, and a certain regimen. These, in my opinion, are often dangerous remedies, and in all cases incapable of bettering the condition of the patient.

It but too often happens that, while they amuse themselves in following a useless course, time passes and the disease progresses. Often the operation was useful and would have cured in the beginning; now, owing to this temporising, the operation has become useless; for at a certain period it becomes as powerless to cure as medicine.

You must not then, attempt indirect medication, at least till you are convinced of the uselessness of an operation. Adopting this view, you will not think of medicine as a curative, but only employ it as a palliative agent. This fear of the inefficiency of surgical treatment is in no wise censurable, for the consequences too often support it; but let us see how far it is sustained.

Let us examine the question of surgical treatment in two lights.

As to the danger of the operation we cannot with reason say that it is very great; very few women die from it. It is true that the employment of the bistoury may be followed by erysipelas; but the same is no less true of a leech bite.

But is the surgical treatment adequate to the cure of the disease?

We must here make a distinction. If, for one tumor visible externally, there are myriads in the body in a microscopic state, if I may so express myself; if, in other words, there is cancerous infection; if the disease is general, a local treatment will be inefficient.

There are those who think that cancer is always a constitutional affection; with such, it is evident that surgical treatment is impotent. If I belonged to this school, I would ever hold my bistoury shut to every such operation. But I do not. I think that if cancer, at first general, becomes sometimes local, if it progresses, so to speak, from the inte-

rior to the exterior, there are numbers of instances where a cancer, at first purely local, may in the end yield to the circulation of its molecules, invade the economy, marching thus from the exterior inwardly.

This view of the matter leads to a special plan of treatment in each case.

If the disease is local, extirpation complete and without the least delay, is indicated. If the infection is general, spare the patient suffering which is always unnecessary and useless, and sometimes dangerous.

Paris, May 1848.

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ART. II.—*Clinical Instruction in the London and Paris Hospitals.*  
By DAVID W. YANDELL, M. D., of Louisville, Ky.

“What are you going to London for?” I once heard a young graduate in medicine asked, who had just had a passport filled for Great Britain. His reply was, “for the hospital advantages and anatomical facilities.” I had passed a summer in that vast city only two years before, in search of medical knowledge, and felt the injustice my young professional brother would be doing himself in sojourning there any length of time, but in the hurry and bustle attendant upon disembarking from a long voyage, although I wished to make myself known to him and point out the error under which he was laboring, the opportunity for doing so did not present itself.

What, in reality are the hospital advantages of London? Great, very great. In comparison with those of Paris? Small, very small. And as for anatomical facilities, there is not a medical school, in any village in the United States, however small, which does not afford subjects for dissection cheaper and in greater abundance than either King's College, or University College, or any other College in London.

I remember very well, that in the summer of 1846, when following the lamented Liston through the wards of the University College Hospital, I thought what an ample opportunity was afforded me for acquiring medical knowledge! At that time I fancied that he who saw most would learn most. It was not long, however, before I began to experience that there was something wanting—that there were too many students about the beds of the patients; that I saw disease, but could neither feel nor hear disease; in a word, that my opportunities carried me to a certain point and there stopped. Not content with what I saw in University College Hospital alone, I followed Key, in Guy's Hospital, Fergusson in King's College Hospital, Lawrence in St. Bartholomew's, and other surgeons in other hospitals; but still the same objections were present to me. I bethought me of the dissecting room, and through the kindness of Mr. Liston every facility was afforded me free of charge, which was effected by my dissecting in his private room. Those students, however, who were dissecting at that time were paying, if I remember aright, a guinea for an arm, 30 shillings for a leg, and from four to five guineas for an entire subject. For what they were paying for a single lower extremity in London, they might have dissected in Paris, from the first of November to the middle of April, and in Florence for two sessions of five months each, and had their knives regularly sharpened into the bargain.

Knowing that clinical lectures were of inestimable value, I looked about me for good teachers, determined to attend their courses with the utmost assiduity. Stanley amused me exceedingly the first two or three days by his pompous, inflated, florid style, but I soon grew weary and ceased attending his

clinics. Fergusson possessed even less talent for lecturing than Stanley, and although the matter of his lectures was pre-eminently sound, practical and valuable, his manner of communicating it was so unpleasant that my patience was soon exhausted. J. C. B. Williams, although by no means a lecturer of the first order was still infinitely superior to either of those just named, and always succeeded in imparting much that was useful, notwithstanding his manner was offensively testy and ill-humored. Quain could almost be said to have been a pleasant lecturer, though he was somewhat wanting in a very essential element of a speaker, animation. Without extending to greater length the list of clinical teachers, it may be said of the London faculty, that it would be a difficult task to find among so many men of extensive acquirements and reputation, so few who were interesting and attractive instructors. The power of imparting knowledge orally, so far as my observation extends, is possessed by a very small number of Englishmen.

Every medical school in London has in connection with it a hospital, access to which is obtained by paying, save in a few instances, a hospital fee, varying in amount in different hospitals.

Admission to the University College Hospital costs four dollars; to the London Hospital, ten dollars; to King's College Hospital, two dollars; and to Middlesex Hospital, five dollars.

The offices of dresser, house-surgeon and clinical clerk, in some hospitals, are obtained by purchase; in others they are awarded to merit. In Guy's Hospital a dressership costs two hundred and fifty dollars per annum; in the London Hospital it commands one hundred and fifty dollars, as is also the case in the Middlesex Hospital.

Attendance upon both the medical and surgical practice of University College Hospital costs one hundred and fifty dollars; upon either one alone seventy-five dollars per annum.

One cannot become an attendant upon the meetings of any of the scientific societies unless he pay the admission fee, varying in different institutions, but in all cases being of some mo-

ment to the student who wishes to take advantage of all the various means of improvement by which he is surrounded. How differently things are conducted on the other side of the channel!

In the first place the most abundant anatomical material is obtained at the *Ecole Pratique*, or *Clamart*, during six months, for six dollars—for less than half the cost of a subject in London. And this, if one is not a candidate for a diploma from the *Ecole de Médecine*, is the sole outlay for medical knowledge. Should the diploma be made an object, the sum that the house-surgeon annually pays at Guy's will meet all the costs and give him thirty dollars to spare. In other words, the attendance upon one single course of lectures in any one of the schools and any one of the hospitals, in London, will cost more than attendance during four years upon the lectures of eighteen professors and twelve hospitals in Paris. In Paris a hospital fee is unknown, and the house-surgeoncy and clinical clerkship, instead of costing their occupants one or two hundred dollars, are sources of almost that much revenue, yielding to each, eighty dollars and their lodgings, the first year, and a hundred dollars and their lodgings during the second and third years.

In London, although each school has its hospital, the number of students in attendance on them is too great to allow of that close examination and continued investigation of cases, which is necessary to give clinical instruction the highest value of which it is susceptible. In Paris the case is different. The number of students at the *Ecole de Médecine* is, say one thousand. These are divided among ten hospitals, and the hundred thus allotted to each are again subdivided and scattered over the building, some in the surgical, and others in the medical wards—some following Velpeau, others Gerdy, and others again Bouillaud.

Let us take *La Charité*, for instance, and observe how instruction is dispensed there. The patients are distributed through sixteen wards, and are committed to the care of eight physicians and surgeons. The wards are open to students



from 7 o'clock A. M. till 10 A. M., three hours, during which time the visits and lectures are made, and operations and autopsies performed. Now, Velpeau, attractive as he is, seldom has with him more than twenty or thirty students during his visit; as soon as he adjourns to the amphitheatre, which he always does at a regular hour, the number is greatly augmented by accessions from the other wards, and even from other hospitals. But during the hour of his stay in the wards he rarely has more students than I first stated, and because he has so many his visits are less profitable to students than those of his neighbor, Gerdy, for the very obvious reason that the few who accompany Gerdy have a much better opportunity for making a thorough examination of the cases. Bouillaud, although, as I have said before, one of the first clinical lecturers in the world, does not generally succeed in assembling more than ten or fifteen students, and consequently every one of them has an opportunity of examining the many interesting cases in which his wards so constantly abound.

French medical students well understand, as I suppose do all medical students who have seen hospital practice, that beyond a certain, and that quite a limited number, seeing becomes a thing quite impossible; and unless the student himself can see, hear and feel the patients, it is quite clear that he will walk the wards of the hospital for many a long day before he can become a diagnostician or practitioner. Merely breathing the atmosphere of hospitals is far from being adequate to rendering students competent physicians. A man, for example, can never learn diseases of the chest unless he auscult, and this he cannot do in a hospital if there be a large number of students. He can never educate his finger, so as to make it an intelligent servant in vaginal examinations, unless he has opportunities to use it. He may grow grey in looking at Hugier and Paul Dubois practice the *toucher*, and be none the wiser for it. It is indispensable, if he would become a physician, that he auscult, and percuss, and *touch* for himself. These are things that cannot be done by proxy, and

the superiority of French hospitals over all others, consists in the facilities which they afford for these examinations in *propria persona*. In a single morning one may see a dozen cases of disease of the uteri, in Jobert's wards, and may auscult half this number of lungs in Bouillaud's wards, at least three times a week.

The industrious student in Paris may see in one morning the cases in both a medical and surgical ward, hear a clinical lecture, witness any operations that are to be performed, and be present at the post mortem examinations. And if he be strong, and fleet of limb, he may follow Roux through his wards at the *Hotel Dieu*, Jobert through his at *St. Louis*, and hear Velpeau lecture at *La Charité*. No hospital, or library, or apothecary's fee is necessary to all this. The matriculation ticket of the school of medicine, or a diploma from any other medical school, secures a card of admission to those hospitals; and in the absence of a diploma, a simple declaration of the fact of your being a foreign student or physician is sufficient, the ticket system having been introduced solely with the view of preventing improper persons from entering the hospitals, and even this obtains in only a few of them.

As I have already intimated, situations in the hospitals are neither bought nor given away; they are the reward of merit, free alike to the young and old, the rich and poor, to be obtained in but one way—by *concours*—which, with all the objections that may be urged against it, is, in my opinion, the best, and in truth, the only decisive test of merit.

Relative to that most important subject, anatomical facilities, one could not wish them greater than they are in Paris. There are two immense establishments set apart for dissections, the *Ecole Pratique*, and *Clamart*; the one within a few steps of the school of medicine, and used during the winter session; the other distant a mile or more, the most convenient, largest, and best appointed building of the kind in the world, and open both winter and summer. The demonstratorships and assistant demonstratorships are the reward of merit, conferred by *concours*. At the *Ecole Pratique* there are five or six

rooms, each furnished with a demonstrator, and each containing eight or ten tables for subjects; and about as many rooms, containing four or five times the number of tables, at *Clamart*. The classes are composed of four or five members; the cost of the dissecting ticket is thirty francs a session; the number of subjects furnished is amply sufficient; the demonstrators are always at their posts, and are necessarily competent. Two courses on operative surgery are given annually; one in the amphitheatre of the *Ecole Pratique*, during the winter, the other at *Clamart*, during the summer. Besides these, which are embraced in the curriculum of the school of medicine, private courses can at all times be obtained from the different demonstrators, who also take, although contrary to the edict of the dean of the faculty, private classes on anatomy. Since I have alluded to the subject of private teaching I may remark, that the various *internes* and clinical clerks are but so many private instructors, whose services are to be obtained at the rate of five or six dollars a month, and it is by embracing the opportunities which these men afford that the student will learn most. Some years ago private clinical instruction in the hospitals was sanctioned by the administration, but being carried by the *internes* to too great an extent, the patients made such loud complaint that it became necessary to prohibit it. A physician, who was *interne* during the existence of the law permitting it, told me, that so great was the love of money or the love of teaching, he could not say which, a short time before the law was repealed, the *internes* spent almost the entire day in the wards, examining and re-examining the patients, very often rousing them from sleep before it was fairly light to begin the work of investigating their diseases, and, not satisfied with prosecuting it through the day, pursued it often by candle-light far into the night. Patients, at length, grew impatient and refused to submit to such torture; the law was abrogated, and under the present system private clinical teaching is conducted *sub rosa*. But the laws of a hundred faculties and administrations would be little heeded by the *internes*, when pecuniary reward was in

question. Human nature can too seldom withstand the temptation of money, and *French nature* is not proof against it. Form a class of four, or even two, and offer an *interne* five dollars per month each, and the doors of the hospital turn noiselessly on their hinges, and the faces of the nurses wear a smile of welcome; the director never intrudes, the patients are your own, to be examined at your leisure, and the *interne* at your side to assist, direct and instruct you.

Orfila, strict, stern and severe as he was, never succeeded in suppressing private courses on anatomy and surgery at either Clamart or the Ecole Pratique, though he often swore he would make *cadavres* both of those who attempted to give and those who received them. They were given in spite of his watchfulness and in defiance of his threats, and would have been given had there been a score of deans all equal to Orfila. They are given now under Bouillaud's administration, and will continue to be given till there are no students willing to pay five dollars a month for a course on the former, and ten dollars for a complete course on the latter subject.

Paris abounds in private teachers. Private instruction can be obtained on any subject. Magendie's assistant delivers lectures on Physiology; Blandin's assistant on Operative Surgery; Paul Dubois' assistant on the *Toucher*; the keeper of Dupuytren's Museum on Pathological Anatomy. The price of these tickets varies from six to ten dollars. Then there are Sichel's, and Desmarre's, and Tavignot's clinics on diseases of the eye, a clinic on diseases of the ear, etc. etc.

Another advantage that cannot be too highly estimated arises out of the circumstance that there are in Paris hospitals devoted exclusively to a certain class of diseases; as the Du Midi hospital to venereal diseases, St. Louis, a large portion of it, at least, to diseases of the skin, and other hospitals to other diseases.

Without extending my present and last letter to greater length, the advantages afforded by Paris may be briefly said to consist in the number, size, and wise and liberal administration of her hospitals, the abundance of anatomical material, the

number of private clinics and private courses, the talent of her public and private teachers, the cheapness of instruction in all its branches, the number and reputation of her scientific bodies and associations, and the system of *concours*. which, while it secures the highest qualifications, is impartial in its operation, affecting alike the rich and the poor, the befriended and the friendless.

In bringing to a close this series of letters, extending now through more than two years, and over six volumes of the Journal, I trust I may be indulged in a few words personal to myself. The correspondence was commenced without any definite plan, and without the slightest expectation that it would swell to such an extent, the chief motive which commenced it and has kept it up, having been a desire to lighten the editorial labors of one to whom I owe all that a son can owe a father; and if I have accomplished nothing else by my letters, it is a source of unfailing satisfaction to me to know, that I have at least been successful in this. The reader who has had experience in literary matters will not need to be told, that the preparation once a month for the press of a long letter, amid the labors of a medical student in Paris, is no small tax upon one's time and energies. But through all the toil and weariness of it I have been cheered at every stage by the assurance, that my communications were well received. The favor, indeed, with which they have met, far exceeds anything that I could have expected or hoped. With an expression, then, of my thanks to the readers of the Journal for their indulgence, and to my brethren who through the press have spoken so approvingly of my letters, I here bring the correspondence to a close.

Louisville, Ky., Oct. 29th, 1848.







